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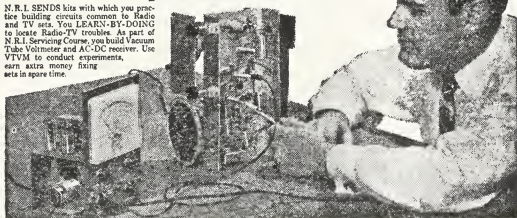
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SCIENCE FICTION QUARTERLY, November, 1957, published February, May, August and November, by COLUMBIA PUBLICATIONS, INC. 1 Appleton Street, Holyoke, Mass. Editorial and executive offices at 241 Church Street, New York 13, New York. Entered as second class matter at the Post Office at Holyoke, Mass., under the Act of March 3, 1879. Single copy 35c; yearly subscription \$1.49. Entire contents copyright 1957 by COLUMBIA PUBLICATIONS, INC. Manuscripts must be accompanied by self addressed envelopes to insure return if not accepted, and while reasonable care will be extended in handling them, it is understood that they are submitted at author's risk. Printed in U. S. A.

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ESCAPE TO EARTH

Novelet of Worlds Beyond

by Manly Banister

Coleman the Great was a stage magician, and his red-headed assistant, Cleo Parker had once been my sweetheart. But Coleman was more than just a magician—the B. I. S. knew it, and I knew it, too. Which is why Johnson wanted me to accept Coleman's offer of a job...

THE PLATINUM-HAIRED man in black cutaway and cloak crouched, and I watched his finger tighten on the trigger of his revolver. The girl lighted full red lips and golden eyes with a smile, tossed flaming hair over bare shoulders.

The weapon bucked and slammed. Kettle drums rolled, crashed to a climax; the audience held its breath. Behind the G-string clad girl, incandescent light bulbs shattered, unheard above the pistol shots and drums. The bullets rang in a steel catch basin.

Coleman the Great turned, bowed smiling toward the audience. Cleo Parker, his assistant, waved gaily; then, lightning crackled and thunder rolled. Blue smoke gushed from the stage. The smoke lifted. Coleman

stood where Cleo Parker had been, and Cleo occupied Coleman's place. They ran laughing to center stage and held each other's hands aloft, while the audience roared.

The curtain came down on the last act of the performance of the world's greatest illusionist.

"Yah, I get it," said the man next to me, as the audience rose. "Them's blanks he's got in the gun, see; and them lights behind the girl, they're wired, see; so they explode when somebody backstage pushes a button. Makes it look like he's shootin' right through her—see?"

"Yeah," said a querulous female voice in the rounded tones of wadded gum. "But how about them changing places like that, huh?"



Cleo had told me of one encounter with Bilfax, when she and Coleman had been in deadly danger. It had been close. She was thinking of that time now...

"Simple, kid." The man chuckled, pleased with his own perspicuity. "Real simple! They got doubles, see, that come out under cover of the smoke!"

"Gee, Gerald," the woman said admiringly, "you oughta be a magician! They sure can't put nothin' over on you!"

I wasn't sure it was that simple. For just a moment, as Coleman had fired, I had seemed to see something—an opalescent veil that dimmed the view of flesh and blue, sequined G-string. Or, had my eyes, under the percussion of instruments and the hammering of the pistol, deceived me?

I'm not the kind of person who watches a magic act to find out if I can see through the illusion; I don't want to watch a magician that clumsy. I want to be mystified, entertained. Only another magician should care how the tricks are done.

As for Coleman and mystification, he still had the experts guessing, though there were millions like friend Gerald, who thought they had every trick figured. In fact, Gerald's thumb-nail sketch hadn't impressed me at all.

Coleman had them still wondering in Europe, and I'd heard he had even shown the Indian fakirs a thing or two, by not only imitating their rope trick, but fashioning a few improvements on it.

In three years, Coleman the Great had climbed from the abyss of non-entity to the glittering heights of theater; he was box office. For the past two years, Cleo Parker, his beautiful, red-haired, tawny-eyed assistant, had scaled the precipices of audience-approval with him.

I hadn't missed a performance while the show was in town. Not because I'm a devotee of stage magic, but because of Cleo. I was mad about Cleo. I'd been in love with her for a long time, in spite of what she had done to me three years ago.

THE WHOLE thing, of course, began and ended with Cleo. It happened to be a very busy season in the advertising business; my position at the agency, as account executive, always hectic, was suffering a siege of particular confusion. But that's advertising.

The first time I noticed the show-bills, I was on my way to the office one cold, blowy morning with a spate of rain in it. I had just parked my machine at the downtown 'copter park and was walking to Eighteenth and Raleigh.

The bills had gone up the night before—there were six of them, all the same. Each showed a headshot of Coleman the Great. He looked as if he was in his early thirties. He had long, platinum-colored hair that swept back from a clean, wide forehead. His eyes were gray and cold, with that penetrating look of the professional wizard. His nose was thin, slightly flaring at the nostrils. The lips were neither full nor bloodless, but firm; the jaw sternly modeled.

"Take a look, boy!" I told myself. "There, but for Fate, soars yourself, Gil Bradley..."

For, under that massive headshot of Coleman was a full figure display of Cleo Parker in her G-string—beautiful, talented, and her name in letters six inches high. Big red letters. Even without the letters, I would have known her—by the go-to-hell smile on her full mouth, the light in her golden eyes, the flaming mop of hair...

If the closest I would ever see Cleo again was a seat down front, I'd revel in it, for Cleo Parker was the greatest cardiac stimulant ever devised in the history of man.

Much as I wanted to go backstage and see Cleo face-to-face, I was afraid to. I doubted that she wanted to see me again. Some people seem to get a lot out of me in a short time, after which I seem to become *persona non*

grata. That's how it had been with Cleo.

And so, I was really shaken up when Cleo called me on the videophone. My name's in the book.

"Gil!" said her image from the screen. I just looked into her golden eyes and felt myself swimming there, speechless. Viewed even this close, by the uncomplimentary video scanner, her skin was without flaw or blemish.

"Didn't you know I was in town?" she laughed.

"Know it! Kid, I haven't missed a show!" My voice was husky.

"Good boy!" A shadow gathered in her tawny eyes. "Gil... I didn't call to rake over... old times!" I'd swear she'd been about to say "dead ashes". Old times—that sounded better. "I... we want to see you, Gil. Important. Can you come over?"

I looked at the clock. It was 12:30 a.m. I had just got in myself a half hour and two shots of rye ago. I signified assent.

"The Carlton..." She gave me the room number. "As soon as you can."

That would be tonight. She nodded, broke the connection. My head was whirling.

THE ATOMIC jets on the 'copter blades rumbled, cutting a circle of flame overhead. I flew low, under the drenching scud, practically on instruments. The wipers clicked and squealed, and water gushed on the windshield. Pretty soon, I made out the smoky flare of downtown neons.

I set down in the 'copter park and went out through the variety section of the supermarket, which was open all night. The grocery section was locked and dark, but the bar and the restaurant were still doing business.

I thought longingly of stopping in for a quick one but resisted.

Cleo wasn't alone at the hotel. Three tall, blond young men were in the room when she let me in. They were

pleasant, even affable—nothing sinister about them, but they gave me the heebie-jeebies. Who wants an audience at an unexpected reunion?

Cleo introduced me briefly. "These are Willie, Tom and Joe," she said. I could see there was something on her mind, and it wasn't old times.

If the trio had other names, Cleo didn't mention them, and I never found them out. She nodded them toward the door, and they went out.

She strode nervously back and forth with that lean-hipped, long-legged gait I knew so well. Her skirt, strictly formal, swished about her ankles. At every third step, she drew explosively on a long, filter-tipped cigaret, making it pop. She talked urbanities—so nice to see me again, etcetera—insincere. I stood, holding my hat so that it dripped on the hotel's rug instead of my new, hundred-and-twenty-five-buck topcoat.

"Sit down and collect yourself," I said.

She flashed me a grateful look, as if the idea of relaxing hadn't occurred to her. I tipped my head toward the door. "Bodyguard?"

She looked at me queerly. "Yes."

The simple affirmative knocked the wind out of the silly comment I had readied to follow my supposed joke. I tried to look wise, as I thought she would expect.

"How would you like a job, Gil?"

This wasn't like Cleo at all. "I've got a job," I said cautiously.

She shrugged, a delicate weave of bare shoulders. "This job pays real money."

"They don't pay me in trade-outs at the agency."

"We need a publicity man... to take Frank Henderson's place."

"I'm thinking of three years ago, Cleo."

"Let bygones be bygones, Gil." She waved her cigaret and the smoke withered in blue coils. "I've told Roy

about you—your talents. He's willing to give you a trial."

"What happened to this Henderson you mentioned?"

She searched me with tawny eyes. "He died . . . in New York."

"Occupational hazard?"

She flushed. "I'm overlooking that, Gil. If you're really interested, it was pneumonia."

"I'm sorry," I said drily.

"You're a first class publicity man, Gil. Why are you wasting your life with account work?"

IT WAS MY turn to flush. "What's wrong with being account exec? It pays."

"You gave up publicity . . . because of what I—?"

"As a matter of fact, I lost the job I had when you knew me. I got into an argument with the boss over a bottle."

"I'm sorry, Gil. I really am." She sounded like she meant it. My heart, which had begun to freeze, thawed a little. God, she was lovely!

"Liquor was never strictly my weakness," I confessed bitterly. "It was a lump of flesh called Cleo Parker."

She got up, strode quickly to the sideboard.

"Drink?"

I could still taste the rye, thick and fuzzy on my tongue, like the aftermath of a ham sandwich. I didn't want any more.

"Thanks. Let's get down to cases."

"I'm offering you a job, Gil, as Coleman's publicity man."

She had pressed her back to the sideboard; her arms were outspread along the top; her tawny eyes were wide, clear of guile. A perfect theatrical pose. She named a salary that made me suck in my breath.

"You could hire *real* talent for money like that!"

"I am. Moreover, we can trust you."

"Any danger I'll die of pneumonia?"

Her jaw set. "If you need time to think it over, it's all right. Can you make up your mind by tomorrow?"

I looked at my wristwatch. "You mean today."

"Have it your way. How about after the evening performance—backstage? Roy will want to talk to you."

"I'll let you know," I said. I turned to leave.

The door opened and Willie, Tom and Joe filed in. I figured they had been listening and resented it. I scowled as I went out. The trio smiled affably and Joe held the door open, then closed it gently after me.

I WALKED the rainy, neon-lit streets, deep in thought. It was too late to buy a drink. I wandered back to the 'copter park and found the restaurant still open.

The coffee tasted flat, but it was hot. I sat in a booth, far back in a corner, and puzzled the situation. Cleo hadn't, after all these years, precisely fallen on my neck, but she *had* offered me an excellent job. Good pay, too. Why me, considering what had passed between us? Was she really sorry, as she had hinted? Did she want me to come back to her? I'd never find out if I didn't accept her offer.

For three years she had haunted me, and now the ghost was coming alive. Maybe . . . old things weren't dead things . . . yet.

Of course, the trouble was, when I last knew Cleo, I hadn't been able to do anything for her. She had thought I could, with my publicity angles and all. It was her ambition that had upset our apple cart. She had wanted to go on the stage. The man she left with was able to give her a better show than I. Corny Vaquero—the South American cornet fiend. She warbled with his band, in night clubs, but it got old, so she left him. Then she had chased two or three other opportuni-

The beam splashed harm-
lessly against Willie's shield.



ties—a Hollywood actor, then, probably, a director or two. Now she had settled on Coleman the Great, and was doing nicely at it, too.

The men in Cleo's life meant nothing to me. The farther she traveled, the more welcome she'd be when she returned to papa—if she returned.

I didn't notice the man until he leaned over my table. He was short, bald-headed, with ears cupped like

flower petals in the rolls of fat at the base of his skull. His eyes were blue and questioning. "Mr. Gilbert Bradley?"

I resented being yanked out of my reverie. I gave him a truculent look. I'd never seen him before, so manners didn't matter. "Who wants to know?"

He smiled, satisfied, and slipped into the seat opposite. I didn't like the smile on his piggish face, as if I was

a pail of slop, and he was enjoying the thought of gobbling me up.

"I have a proposition..."

I buried my face in my coffee mug, ignoring him as well as you can ignore a man in one of those dinky restaurant booths.

"...that will mean a great deal of money for you. All you have to do is accept the job offered you tonight."

I set the mug down with a bang. Coffee slopped on my hand. His smile drew thin, a weirdly improper look on such fat chops.

"Money talks, does it not, Mr. Bradley?"

"I've been quoted a salary. It's quite enough!"

"There is still more to be had... if you work also with us. I represent an organization willing to pay well to have a man on Coleman's staff."

2

I STARED at him; I knew what he was driving at—Coleman's professional secrets. I had heard more than hints of the efforts that had been made by the competition to discover how Coleman performed his illusions.

"Henderson worked for you," I accused briefly.

His eyes narrowed. He shrugged, then gave with that thin smile again. "Have it that way. He was, however, of no value to us."

I laughed, harshly. "Pneumonia! And Henderson died..."

He raised piggy little eyebrows, shrugged. "I don't know how Henderson died. It is not important. You aren't *afraid* to take over his job?"

"What's your organization?" I wanted to know.

"I am not prepared to reveal that. You need have no fear, however of its solvency—"

I leaned toward him, sloshing coffee again. "Solvency be damned! I'm not interested in your solvency, or your

proposition, either! Now, get the hell out of here and let me alone!"

I lifted the mug threateningly, and his face whitened under its pink, sweaty sheen. His eyes went the color of agate and his lips tightened. I decided the man was dangerous. Then he smiled, jeeringly. He stood up and looked down at me, possessing himself, calmly impassive. "If you change your mind, you'll find me at the Carlton. Ask for Mr. Gregor."

The Carlton! I stared at his retreating back, wondering how much he had paid somebody to tap Cleo's videophone—maybe plant a visaudio pickup in her room.

I didn't have much time to kick the thought around. A big man, muscled, brushed past Gregor on his way out. He made straight for my booth, squeezed in without an apology. His topcoat was wet, and the brim of his brown Stetson dripped a dismal pool on the plastic table top.

"This is getting monotonous," I said uncordially.

"Sorry, Bradley." He fumbled in his breast pocket. His face was lean; the nose sharp; hazel eyes were shadowed under shaggy brows. When he spoke, I caught a glimpse of snaggy, yellow teeth.

He flipped his hand toward me, displaying credentials, and a curious thrill wriggled through my nervous system. "I'm Johnson," he said flatly. "Bureau of Internal Security."

I couldn't resist being an advertising man, of the cute type. I said, "I'll confess. You don't have to beat it out of me."

It was weak repartee, and both of us knew it. "Smart!" said Johnson with a hungry smile that showed his big, yellow teeth. "Do I have to tell you what I want?"

I thought, standard procedure, B. I. S. handbook, page number so-and-so—quote to throw the suspect off balance and render the impression that

his guilt has been discovered, etcetera, etcetera unquote.

"I'm not a menace to national security," I said, "and I don't know why you should give me the impression you think so."

The corners of his mouth lifted, pushing ridges of flesh against his high cheekbones. It made him look wolfish. "The Bureau has a funny way of thinking that people who look innocent on the surface are guilty as hell underneath."

"Guilty of what?"

"Maybe *you* can answer that better than I."

An intense man, Johnson, capable at his job. The country is safe in the hands of men like Johnson. But what was he pushing me for?

"I'm afraid I can't," I said.

Johnson's lupine grin twitched wider. "We've had our eye on you for two years, Bradley. You and a lot of others."

THE STATEMENT staggered me. Had anybody even faintly hinted I was under surveillance by the B. I. S., I would have laughed in his face. I began to worry, going over past sins. I had never done anything I couldn't explain and right now, I couldn't think of anything that needed explaining.

"What do you mean by 'a lot of others'?" I wanted to know.

"Everybody Cleo Parker has ever known."

He triggered his bomb right in my face, just like that. I stared, the blood draining slowly, leaving me white with anger. My cheekbones felt on the verge of splitting the covering skin.

"What's Cleo got to do with it?"

He saw I was mad, and it didn't faze him. "How much do you know about Coleman the Great?" he came back with equal savagery.

I saw I'd never get anywhere dueling with this expert. He could hammer me all night, brain-dazzle me into

pliant mush. I spread my hands. "I'll level. Coleman's a stage magician—a good one. I've seen him perform. I've read his reviews. Raves. I admire his ability and showmanship. Anything more I can tell you?"

"About 12:30 tonight," Johnson thrust coolly, "Cleo Parker called you, at your apartment, on the videophone. You were in. You took the call. She asked you..."

"That's enough." I interrupted sulkily. "So Cleo called me. I went over to see her. Is that a criminal act, affecting the security of the United States?"

Johnson grinned tightly. "It could be. Let's stop kidding around, Bradley. I'm serious. Could the Parker woman have called you over to offer you a job?"

"You were listening; you ought to know."

"All right, she did. She asked you to fill Frank Henderson's shoes."

I alerted. "What's about Henderson? He died."

"Sure, he died. Doesn't it worry you?"

"Not so you could notice it," I lied.

"Henderson worked for the wrong people."

"Coleman."

"And somebody else."

"Gregor."

"Exactly—until he got in Gregor's way. He took Gregor's money, Bradley, and failed to kick through with what Gregor wanted. That was dishonest."

I got his drift. "If you know Gregor killed Henderson, why is Gregor still walking around?"

"We've got use for Gregor...yet."

The image of Gregor rose up in my mind, fat and shining.

"Did you take his proposition?" Johnson asked.

"Hell, no!"

"I thought not; he went out of here looking murder. Look, Bradley, we

know you're clean. Does that make you feel better?"

"Thanks," I said drily. "I travel with a clean crowd."

"Keep it that way. Stay away from Gregor, and take that job Coleman has offered you!"

"I don't think I want it," I protested. "Cleo and I didn't get along too well before..."

He nodded, grimly. "We know about that, too. She ran out on you."

"I don't hold that against her..."

"You're a poor liar, Bradley." His tone turned friendly, confidential. I wondered on what page of the B.I.S. manual that tactic was recommended, and under what circumstances. "It's natural you'd resent it, but I'm asking you to forget it. Play up to the woman. Take that job—and do your country a good turn for a change."

I said, "I don't like this..."

Johnson gave me a level stare. "It's Coleman we're after, not you or the girl. By working with them, you may be able to find out what we want to know."

"What have you got on Coleman?"

A queer look crossed his craggy features and he shoved his hat to the back of his head. "Nothing—that's the hell of it. If we were sure, even, of what we suspect, we wouldn't need you. We'd nab him right now. I'm suggesting that you forget your own feelings for the time being and work with us."

"I don't take pay from two masters."

"You'll get no pay from this one. The United States government doesn't pay for what we want you to do. It's your patriotic duty. You work with us because you *want* to."

"Suppose I don't?"

He stood up, smiling grimly; his hazel eyes danced under bushy brows. "It's immaterial. *We* want you to. That's the point!"

I FLOPPED and tossed in bed, listening to the wind throw rain in sheets against the glass as it howled around the fire escape outside my window.

I must have dozed, finally. The next thing I knew, the lights were on. It seemed preternaturally quiet, and I thought perhaps the rain had stopped. There was a big, foreign-looking man sitting in my bedroom chair. He was thick through the shoulders and waist—not fat-thick, but muscle-thick. He seemed to be about fifty, his hair gray as a day-old crust on snow, crew cut, and his ears looked as if they stuck out farther than they really did, because the sides of his skull were practically shaved. His eyes were black, and they did something to his expression, loaned an air of restrained fierceness to the thick jowls that flowed into his bull neck.

I'd had a couple more shots from the rye bottle before bedding down, and what they had done to my visual coordination was atrocious. I saw the intruder, and marked the details, but I wasn't sure he was really there. There seemed to be kind of a mist between us—where had I seen its like before? Or did the trouble lie in optic nerves frayed by alcohol?

I mumbled a protest. The man shifted one of his hands, and I saw the thin, metal tube he gripped in heavy fingers. He didn't blink, or try to smile. He stared at me out of that cold, blank face of his. "Wake up," he said brusquely. "I haven't all night!"

His thick lips scarcely moved. I grunted, "Who're you?"

"Who I am means nothing to you, Bradley. I represent people who require your cooperation—"

I noticed how he put it. "Require."

"We are willing to pay you for your service."

The difference, I thought, between being inside the law and outside. Out-



Coleman was ready for this attack.

side, they offer to pay for cooperation. I sat up, hugging the blankets around my knees.

"Every time a different canary," I said, "but the same old tune."

"You have had two offers tonight." He paused to let the significance sink in. "We've been watching. Your race has a saying about a third time being a charm, Bradley. This is it. My organization—"

"Get out of here with your organization!"

"Don't be hasty, Bradley." His tone was low, rough-edged. "My organization has a certain...interest...in the man you know as Coleman the Great. You may as well know this, that he is a dangerous criminal whom we are trying to apprehend."

"Apprehend him, then! Why bother me?"

"He protects himself well. We need a man, such as yourself, having personal access to him..."

"I don't buy," I sneered. "I'm not even taking the job!"

"You better had," he said calmly.

"Threats, yet!"

His expression didn't change. He lifted his hand and the metal tube in it seemed to point directly at me. His thumb moved on the polished metal. Flame crackled thinly by, a foot from my left arm. My bicep and ribs jolted as if smashed with a sledgehammer. The headboard of the bed heaved and crackled; smoke vomited from my pillow, reeking of burned feathers.

I threw myself off the bed, yelling,

and sprawled on the floor, rubbing my arm and sobbing with pain. The stranger laughed, a deep belly chuckle with round, nasty undertones. "I missed you by a foot! Perhaps now you will go to work for Coleman?"

"He may, but let him decide," said a new voice.

The intruder snapped around. I gawked from my pose, frozen on the floor. Willie stood there, indistinct, similar to my visitor, and the same as—

He held the twin to my guest's flame-spitting little tube.

THE STRANGER'S neck bulged until the cords stood out. He began to shout, in a foreign language. Willie shouted back at him, but their voices came to me subdued, as from far away. Willie kept saying something that sounded like "Bilfax", calling the other by name.

Bilfax pointed his tube at Willie, his thick features distorted with fury. It spat a thin needle-bolt of flame. I expected to see Willie smoke and collapse, but the bolt struck the hazy, opalescent field surrounding him and darted all over it in instantaneous, crackling sheets of flame. The air stank of ozone.

Willie said something again and waved his tube weapon, safe in his protective bubble. He wasn't stupid enough to fire at Bilfax, similarly protected. Bilfax abruptly vanished, leaving me alone with Willie.

I struggled half up from the floor, clutching the bed.

"Sorry for the trouble, Gil. I should have kept closer watch on you."

"Are you all right, Gil?" another voice broke in. It was Cleo's, and she stood beside Willie; she hadn't been there an instant before. She looked at me, and a pretty picture I must have made, with my pajamas slewed around slaunchwise, my hair no doubt standing on end with sheer terror.

"I'm glad you're all right," she smiled, worry gradually easing out of her eyes. Had she been worried over me?

"How...how...?"

She understood what I meant. "nothing supernatural, Gil. Roy has a...matter transmitter..."

"A mass-space matrix de-analysis scanner," Willie said helpfully.

It barely made sense, but with personal force shields and matter transmitters available, I began to understand some of Coleman's so-called illusions.

"We'll see you tonight," said Cleo, "after the show."

She disappeared.

"Good night, Gil," said Willie, and vanished in turn.

I groped for the rye on the nightstand. I didn't bother with a glass. I let the bottle gurgle until empty.

I sat on the edge of the bed in my pajamas and held my head in my hands, the raw fumes of the rye smarting my palate. I had had too much for one night—not whisky—events!

I stared at where the most recent event had enacted itself, but there was nothing there to give me a clue I had not been dreaming. I let the thought take hold. Surely, it was simpler to believe I had fallen out of bed and the whole affair had dreamed itself in the split instant of my fall.

I laughed shakily, cuddling the empty bottle.

I sat for a while, listening to the rain that had started up again. It beat on the window and slushed on the fire

escape, and I tried to chase the fragments of the dream from my brain.

To fall asleep immediately, I feared, would drop me back into the dream. Bilfax was a character I didn't want to meet again—not even in dreams.

I turned to punch up my pillow. That's when I saw the seared streak through cover, case and feathers. A singed smell came up, strong. I jerked the pillow aside. The headboard was split, blackened and shattered...and the wall behind it, the plaster burned off, exposing charred lath. And my arm and rib cage still ached numbly.

I began to shake and sweat started out all over me. I thought of mean-looking people named Bilfax, of needle-flame weapons that maimed just by missing close. Of people knocking around, in and out of my room, by matter transmitter. What did it all add up to? *I hadn't been dreaming!*

I remembered the force shields protecting Bilfax and Willie, and remembered, too, where I had seen their like before—around Cleo when Coleman shot at her on the stage. I had seen what that shield did to the charge from Bilfax's weapon—I knew what it had done to the bullets from Coleman's revolver. He *had* fired real bullets, of course. The shield had passed them *around* her. And then, the two had exchanged places by means of the matter transmitter. Illusion? *Science*—beyond anything I had ever heard of! No wonder the B. I. S. was interested—and Gregor...what country did he represent, anyway? I could guess. And who was Bilfax?

3

AT FIRST, Coleman the Great seemed older than I had guessed, and then I decided it was more expression than appearance. He was tired. Weariness tugged the

corners of his mouth down, hooded his eyes, made flaccid his thin cheeks. The fine, sensitive nostrils seemed collapsed against the bridge of his nose.

He was still dressed in the traditional black cutaway and cloak he wore on the stage. Cleo hadn't changed to street clothes, either, but she had thrown a robe over her bare shoulders, concealing her G-string costume.

When she introduced me to Coleman the Great, I had the feeling that she was herself in awe of him. He slumped in a chair. The mirror lights shone on his platinum hair as he looked up at me.

"I'm glad you'll be with us, Gil," he said, calling me by my first name, before I had even spoken to him.

There was power in his voice, a quiet kind of power. He seemed to take for granted that I had accepted. I wondered what Cleo had told him. He had scanned me with one swift look of his remarkable gray eyes, and he knew. I knew, too. I *wanted* to work for him.

I said, "It will be an honor, Mr. Coleman."

He smiled. "Everybody calls me Roy, Gil."

I grinned. "Okay, Roy!"

"Would you wait while we change? We're rather quick at it."

Willie was at the stage door, shepherding two taxis. Tom and Joe got into one, Willie got into the front seat of the other, and Coleman, Cleo and I had the back. We bumped along toward the Carlton with a subdued whine of the turbine engine.

"We've another day here," Coleman said, "then we move on to Miami for a week's engagement, then to New Orleans..." He discussed the itinerary.

I listened. My mind was already at work, probing the angles, working out the details of the publicity. By the time we reached the hotel, I had the general plan of my campaign mapped

out, depending, of course, on details I'd pick up later from Cleo.

"Will you come up?" she asked me.

Neither of them had mentioned last night. I had questions about that, but Coleman looked dreadfully tired. I shook my head. "I've got a lot to do, and only a day to do it in. Suppose I join you when you're ready to leave town?"

We made plans then to travel south together. I waved, and the taxi scooted off with me, toward the 'copter park. I didn't see the other cab drift away from the curb and fall in behind mine, but I knew later it must have.

The supermarket section was still open, and I entered there, making my way toward the public room. Weary clerks stood around, clock watching as the hands crawled toward eleven.

The emptiness of the place made it easy to notice the man who entered behind me. I looked casually, and the man turned, studying a rack of magazines. I recognized him from his hat and coat, the stoop of his big shoulders. My tail was Johnson, the B. I. S. man.

I drifted along the row of cash registers, taking my time, and paused in the door of the public room. Although the market closed promptly at eleven, the bar would be open to midnight. I ambled across the public room to the neon-lighted entrance.

THE GIRL had brought my Martini by the time Johnson sauntered by. He looked down and his face lit up—as artificial as the neon sign outside.

"What a surprise!" I said. "I hope you had no trouble following me from the hotel?"

"That's what I like about you. You observe things."

He sat. His smile was probably as pleasant as he could make it, but his yellow teeth didn't help. He looked ready to bite.

"Have a drink?"

He nodded and I called the girl over. I toyed with my glass, waiting for him to arrive. It came, finally.

"I guess you took my advice," he said over the rim of his glass.

"You must have had the cab wired for sound," I thrust. "It happens that I don't take advice—I decided it pleased me to accept Coleman's offer."

"May it please you also to work with us."

I twisted my glass, making wet marks on the table. "So I work with you. What am I supposed to discover—Coleman magicking military secrets out of Washington? Why don't you do your own gum-shoeing?"

Johnson swilled half his drink and laughed. "You see too much TV."

"I'm just curious," I said, "how I can best serve my country's interests. I don't know anything about Coleman. If you say he's a bad 'un, maybe he is. I've got no more sympathy for subversives than you have."

Johnson sobered. "I'm not passing judgment on Coleman; all you have to do is see what you see and report."

"What am I supposed to see?"

"Anything. We aren't particular."

"Even unimportant things?"

"Especially. They might be important to us."

"How do I report?"

"Directly to me."

"Where will you be?"

He fumbled for a card, passed it over. "If I'm not around, 'phone me at that number. It's the office. They'll get in touch with me."

I pocketed the card. "I don't suppose it'll do any good to ask you what I'm looking for?"

"That's right. And you're not much more in the dark than I am."

I frowned at my drink, thinking. I had too many questions in my head to sort them all out. Too many implications were snarling me up, too. I had wanted to talk to Cleo tonight—

Lord, how I *had* wanted to talk to her! But there would be time and opportunity for that later.

I wasn't sorry I had decided on the spur of the moment, as it were, to hook up with Coleman. He inspired me with confidence. And there was Cleo, too. Whatever this bloodhound of the law was after, I was sure he was baying up the wrong tree. I was glad enough to go along with him, just to prove him wrong.

I drained my drink. "Okay, I'm with you." Ice rattled in the glass as I put it down. "'One if by land and two if by sea'—sit tight, Paul Revere's out for his ride! Suppose Gregor tries to grab the reins?"

"Never mind Gregor. We've got him tabbed."

I tried a shot in the dark. "You've tabbed Bilfax, too, I guess."

Johnson was the picture of a frozen sleuth. "Who?" He shook his big shoulders. "Who's Bilfax?"

I laughed, a nasty, jeering sound. "I made him up! Put the drinks on your expense account!"

I swung jauntily out. Johnson looked solidly after me and fumbled for his billfold.

ORDINARILY, I'm not keen at looking around, but the events of the past twenty-four hours had made me jumpy and observant. I stopped just short of putting my key in the lock of my apartment door.

Either I had thoughtlessly left the light on in my living room, or—I pressed my ear against the panel. The apartment house hummed faintly with the myriad voices of heaters, refrigerators, TV sets and living occupants.

I had learned caution. I retreated up the stairs. There was a carpety smell on the air, endemic with apartment house halls.

Minutes later, I stole down the fire escape from the roof and paused on

the landing outside my bedroom window. Luckily, it was unlocked.

A fan of pale light seeped under my bedroom door. I crouched at the keyhole. If somebody was in my living room, he would be watching the hall door. I could see my big easy chair, but its back was toward me. But I could also see part of one armrest, and I saw a blue-sleeved elbow resting on it.

Everything in me screamed to retreat. But somewhere along the line, I had to face things... or wind up like Henderson. I slipped out of my coat, thinking about Henderson.

Okay, Paul Revere, I told myself, it's now or never. I flung open the door and leaped. I went over the back of that chair like a tidal wave, grabbing as I went. My fingers found soft throat and gripped. I tumbled over, yanking, and pulled the interloper struggling to the floor.

There was a high-pitched, strangled scream. Masses of hair—flaming red hair—cascaded in my face.

I let go like the touch of her burned me and Cleo Parker sat up, making noises. There were tears of pain in her lovely, honey-gold eyes. I tried to help her up, but she pushed me away, ferociously. I can't say I blamed her.

She pulled herself shakily into the chair, rubbing her throat. "Do you welcome all your visitors like that?"

"Sorry," I mumbled. "I thought it was Billfax. There *is* Billfax, you know."

She understood. She grimaced wryly, tawny eyes scrunched up. I felt like hell, remembering I'd laid violent hands on the woman I loved. But just that momentary contact with her, frenetic as it had been, had awakened my nervous system to tempestuous fury. My pulse throbbed. I lit a cigarette, nervously, and offered her one.

"I should have waited," she admitted, drawing at the match I held.

"Naturally, I thought you'd use the hall door."

"And so I would have, ordinarily. I suppose you dropped in by matter transmitter?"

"It *is* unbelievable, isn't it? Roy possesses science we haven't dreamed of, Gil. And there are people who want to get it away from him. That's why we have a bodyguard, and protective devices—"

"Like personal force shields," I said, "that turn away wrath. You aren't wearing yours."

"Do I need it... around you? Oh, it's wonderful and unbelievable, Gil, but it's true. And now I must ask you to forget all about it."

I stuck out my jaw. "Forget? Why?"

She said, "Get me a drink, Gil. Please."

"There's rye in the kitchen. And ginger ale. Okay?"

I got the unopened bottle and the ginger ale and mixed two drinks, stiff ones.

"Here's to old times!" I drank mine down.

Cleo sat musing over her glass, her hair a heap of ruffled flame. She smiled, a ghost of expression. "To *better* times," she said, and drank.

"Now, what's it all about?"

"It's all up, Gil. We aren't going to need your services." She held a check in her hand. "This will pay for your trouble..."

I spurned the check, scowling. "Gil, we need you! Gil, we don't need you!" Blow hot, blow cold, woman, but why both with the same breath?"

"Roy received an important message tonight. We are leaving within a few hours. Willie has sent wires to Miami and the other stops on our itinerary, cancelling our engagements."

I picked up the bottle, poured myself a straight one, and tossed it. I offered her the bottle. "This will make you talk plainer."

She waved it away. "It's sudden, Gil, but not unexpected—to us, Roy has just about accomplished what he has set out to do. But now he has to move fast...briefly, Gil, Roy is leaving the stage."

"For good?"

"For good. He has wired his agent to pick up our theatrical equipment here and dispose of it. There will be no more Coleman the Great."

MY HANDS were shaking. I could sense Cleo being snatched out of my grasp. I dragged deeply on my cigaret.

I thought of Johnson. Wouldn't he like to know about this! Or maybe he did. The B. I. S. had ways of knowing things. So what would he do—tell Coleman he had to take little Gil along, wherever he was going? What a lousy spy I was, out of a job before I was in it!

"I thought Roy was a showman," I said harshly. "I never heard of a *real* showman walking out on a performance."

"Why not? The show isn't important now. You don't understand, Gil! Roy is something quite different from what you think he is—something truly great and wonderful. You saw Bilfax. He's Roy's greatest enemy. Bilfax is closing in on Roy...he's dangerous! But what's the difference? We're leaving, that's all, Gil. This check will make it right with you. You can go back to your job at the agency—"

"Sure. I'm not worried about myself, Cleo. It's *you*. You're living dangerously, and I want to get you out of it."

"You can't. Roy happens to be a scientist, Gil. His illusions...well, they're real, not faked. You've probably guessed. There are people who would like to get their hands on the secrets Roy controls."

"People like the U. S. Government?"

She looked at me candidly. Her

golden eyes did things to me inside.

"And a few others. That's all I can say."

I was feeling the rye, and reckless, too.

"Huh-uh. There's something else you can say, darling. I keep remembering three years ago..."

"Gil!"

"Save the shock, baby. You want me back and you know it. You're still in love with me, Cleo, like *I'm* in love with you!"

She looked wretched and white. Her eyes searched mine, with something frantic in them.

"You know it's the truth, darling. Why fight it?"

I leaned over and kissed her full on the mouth, pressing down hard, grinding her lips under mine. For just a moment she yielded. I thought it was capitulation. It wasn't. It was just to slide down in the chair and get a purchase to push me away. I staggered back.

She stood, calmly straightening her skirt. She didn't look at me. "I'm sorry you did that, Gil."

"Why? *I'm* not sorry!" I snatched Coleman's check from the arm of the chair, where she had dropped it, and tore it across. "I loved every split-second of it!" I handed her the pieces. "Why should you be sorry, knowing I love you?"

"That's why *I am* sorry, Gil. Roy is my husband."

4

ONE CENTURY, two centuries...aeons marched, tolling their years with leaden bells.

"*You lie!*"

My eyes searched her left hand.

"That is unkind, Gil. I don't wear rings, for professional reasons. But *I am* Roy's wife. It's true."

Winter in June, snow in July. The leaden bells clamor. I pressed my hand against my eyes.

And I heard Cleo scream.

I responded fast, all the primitive in me surging up. There was a man in the room, his back toward me, and Cleo struggled in his grip. He could only have got there by matter transmitter. Bilfax! I gripped his shoulder, whirled him around. It wasn't Bilfax; it was somebody I had never seen before.

I slugged him behind the ear, and he went down, still with a mad, ferocious look on his face. And then the room swarmed with men, closing in on us. I saw Bilfax—for sure this time, and Willie, Tom and Joe. Bright needles of flame, spat and crackled. Nobody got hurt but me... something hit me from behind...

I WAS JUST waiting for a 'copter bus, I told myself, then along came this truck... I opened my eyes. I didn't know where I was, but I knew it was a hospital. Everything was white, all around, the walls, the bed; and the sandy-haired young doctor bending over me was clad in white. He was just pulling a needle out of my arm when I woke up.

None of it registered with me. I watched him vacantly, waiting for him to say something, like, "This is a hospital," or, "You've been in an accident," or something like that. But he didn't say anything; he just smiled and patted my arm with cotton that was cool and wet.

Then he straightened and said something over his shoulder to people standing there I hadn't noticed. He spoke in a foreign language, and I saw he was talking to Coleman and Willie.

Coleman smiled at me. "The doctor says you're okay now, Gil."

"Thanks." My tongue was thick and Willie said, grinning, "You had a

close call; a needle-bolt missed your skull by a bare two inches."

"I must be tough," I said. "I let the breeze knock me down."

"A needle-bolt *can* be fatal within six inches of the head!" reproved Coleman. He was wearing some kind of a dark blue, single-piece garment that looked like a uniform. He said, "You're lucky to lose only ten days, instead of your life."

So it had been ten days. Then I remembered what Cleo had told me last night... ten days ago, and I thought I ought to hate this man standing by my bed. But I couldn't. He had saved my life.

Coleman leaned over me, squeezed my shoulder. "You'll be up and around tomorrow. Don't worry about anything."

"How about Cleo...?"

"She's safe, thanks to you."

I shut my eyes. Coleman had looked solemn. Where would Coleman be now if Cleo had fallen into Bilfax's hands? What was up between Coleman and Bilfax? My mind balked at that path.

"Your friends play rough," I grunted.

Coleman's eyes looked deep and calculating. "The bigger the game, the rougher the contestants play, Gil."

"You call *this* a game?" I touched the back of my head, expecting to feel bandages. There weren't any; the hair was short and fuzzy, growing in.

"A little hair off the back," grinned Coleman. "It'll grow."

He and Willie said goodbye and left. The doc went out, and by and by an orderly brought me a tray of food.

CLEO CAME in as I finished. She took the tray of dishes, placed it on the nightstand. She sat down with the dirty dishes between us.

"I brought you some cigarets." She offered me an opened pack. I took one, she lit it, and dropped the pack beside the tray.

"We've got a lot to talk about," I said, drawing deep.

"It was all my fault, Gil. I should have worn my body shield when I dropped in on you."

I thought of her body against mine when I had manhandled her, and I was glad she hadn't been wearing a shield. "I guess Bilfax's man wasn't wearing his, either, or I couldn't have slugged him."

"And he couldn't have touched me, either." Her eyes were golden, a frightening combination with her flame-red hair. "Thanks, Gil."

"Skip it. I'm going home tomorrow and forget the whole thing."

She shook her head. "If you mean to your apartment, it's over a thousand miles away. We had to bring you here for treatment."

"More matter transmitting," I suggested.

"That doesn't work over a long range. We brought you by 'copter. You're at Roy's base of operations, in the mountains."

I didn't know what she meant by that. I was almost afraid to find out.

She went on. "You will have to stay with us, now. Roy thinks it's better that way, now that you've gotten in as deeply as you have."

"How do I know when it's too deep? When I drown?"

I looked into her eyes, knowing it could happen there.

"Let's hope it won't come to that, Gil."

Had she guessed my meaning? Frustration clamped my brain. I reached for her hand. Oddly enough, she let me take it.

"I remember sounding off," I mumbled. "Sorry, Cleo. I guess it's too late now..."

"Far too late, Gil."

A look of exalted *dedication* came over her face. Whatever it was Cleo had been seeking when she left me, she had obviously found it. I said, brood-

ingly, "Tell me what it's all about, Cleo."

She was thoughtful, seeming reluctant to speak. I took my hand away.

"I'm in it," I said bitterly, "without knowing what it is!"

She made the flames dance on her head, and frowned. "I'm trying to think how to tell you. I knew I would have to. It isn't easy. Roy agrees you should know, if you will believe..."

"I'd believe it if you say he's the Man in the Moon." I rubbed my fuzzy afterskull gingerly.

Her eyes gleamed molten gold. "Not the Man in the Moon, maybe... something more remote. His name isn't Coleman... among Roy's kind, he has a different name."

"What are you trying to tell me?"

"Roy isn't from anyplace on Earth... or the moon, either. He comes from a distant solar system, across the galaxy."

Her words trickled into silence. I was thinking furiously. It all fitted, of course. "What's he doing here?"

"He had to earn some money, Gil."

"Don't they have money where he comes from?" It was a facetious question. She shrugged it aside.

"Roy never *wanted* to come here. I like to think it was Fate, so that I... well, it *was* an accident, sort of. It's against the law of Roy's people to land on a... backward... planet like Earth. They are extremely advanced scientifically. Their... their history goes back a million years before ours. We're... well, we're *savages* to them, not yet ready to take our place alongside the real civilizations of the galaxy."

"He, the man, and we, the apes," I said, bitterly.

SHE WAS looking ceilingward, her eyes mirroring fright. In that tipping of her head and the turning of her eyes upward, I read a world of

thoughts, of things that couldn't be expressed in mere words.

"There's a war going on out there," she said breathlessly. She looked me full in the face. "I said we are savages, but maybe you're right. . . we're apes." She tossed her head defiantly. "You're wondering why Roy's people don't show themselves to us, offering us a helping hand?"

"As a matter of fact, I am."

"They did that sort of thing, once; thousands of years ago. They discovered retarded cultures, like ours, among the stars, and taught them. . . tried to lift them up. It didn't work. You lose the use of your own legs when you walk with the aid of a crutch. Other races took the shock of change differently. Bilfax's race was one. They learned all Roy's people could reach them, then renounced their mentors. They had been introduced to the future too soon, and it unbalanced them; they began to war against worlds around them. When Roy's people moved to stop them, they turned on them. That war has been going on for thousands of years. There's no such thing as *blitzkrieg* in interstellar warfare. . .

"Anyway, Earth is in enemy territory, a segment of the galaxy dominated by Bilfax's race. Earth, to them, is an unimportant place. They consider us savages, too. . . or apes. But they are no better than apes, themselves.

"Five years ago, Roy brought his spaceship near here on a scouting expedition. It met an enemy cruiser. The engines were destroyed, but Roy escaped with his ship and part of his crew."

"Escaped to Earth?"

"He brought the ship down here, yes. The damage was terrible. I couldn't understand Roy's explanation—it all has to do with space and time and the tremendous distances involved in traveling among the stars. You can imagine the complexity, and delicacy,

of such a drive. And it was destroyed."

"And Roy set down on Earth for repairs?"

"He is almost finished; it has been terribly costly. And Roy was all alone, with the fifty men left in his crew. He couldn't call on his own for help. At first, he thought we could help him, but the dismaying truth is that our technology can't even produce the parts he needed!"

"So he had to produce them himself."

"Worse than that. He had to build the machines to produce the parts he needed. You can see how it was. . . and he had nothing to use for money."

"He could have stolen what he needed."

She gave me a smile of grim exasperation.

"Steal what didn't exist? The materials he could *buy*—a few things he could *have made*—but money was the first need. It's one of the peculiar aspects of our culture. He dared not reveal himself to us—you may be sure he's dedicated along the lines of *that* concept. He studied our culture, and decided he could earn the most money, most quickly, in show business. So he became a stage magician—"

"Is that his line. . . out there?" I looked ceilingward.

SHE ALLOWED herself a polite laugh. "Far from it! Roy is a scientist, a technician, a commander in the space navy, a. . . a person of high importance in the affairs of his own world. He saw how his scientific knowledge could help him produce stage illusions that would defy the explanation of our experts. This superior science is commonplace to him—to us. . . ignorant apes. . . it's really and truly magic."

"I see what you mean."

"Roy has earned the money he needed, Gil."

"And now he's leaving Earth?"

"Not...yet. As soon as the final tests and adjustments are made. He's expecting a shipment, or something, soon. But he is in a hurry, of course. You see—Bilfax has finally located Roy's ship!"

The puzzle made a picture, now that I had all—or almost all—the pieces. I didn't relish being caught between the opposing millstones of an interstellar war.

I felt like a man clinging to a rock on a nameless shore, washed by a tide of great force, insensate, of which I suffered the relentless wash without understanding. I saw the universe of stars in a new way, knowing their host of peopled worlds, where men strode among men; and I felt that *our* way was like the hanging by tails of monkeys in tress.

But were they so different, after all, these men of the galactic spaces? Didn't they have the same passions and appetites as we, the same aspirations, both holy and unholy? Didn't they, for all their million years of science in advance of us, love and breed the same way we do, build their cities, carry on trade, engage in occupations of peace and war?

Surely, man is the same, wherever he is, whatever his race, his name, his technology...

Where was Bilfax now? Up there, perhaps, floating among the atoms of rarefied air in the upper atmosphere, biding his time to strike. Such as Bilfax would take no account of the difference between the man he sought to capture or slay, and the apelings drawn into this web of supercosmic intrigue.

I was grateful to Coleman for saving my life, but of what use was that life to me if Bilfax struck, or if...

"You are leaving with him," I said.

"I'm going with him, Gil."

"Have you thought what it will be like?"

"He loves me, Gil, and I love him.

What can make any difference between us, so long as we have that?"

"Will you still have it, once you are set down on his world like a howling orang-outang at a Fifth Avenue tea,"

She flushed. "I don't like that simile."

"The least you can say is that you are a live mummy from a million years in the prehistory of his race!"

"At least, Gil, I'm a *live* mummy!"

5

COLEMAN'S installation nestled in a cup in the mountains. There was snow on the slopes, and sentinel firs to the timberline. Below, the valley wore a spiky carpet of dark green forest, and the thin, silver thread of a stream curved through it. The air was cold, and it smelled of the forest and snow.

The building was long and low, built in board-and-batten style, with a roof of corrugated aluminum. Every piece had had to be brought in by helicopter. The far end was devoted to a machine shop. My late quarters, from which Cleo had conducted me that morning, was a sick bay, rather than a hospital. It adjoined the living quarters, where the crew on surface duty slept, the kitchen, dining and recreation rooms. I could see no ship.

On the west, the downhill side, a natural shelf had been further leveled to afford a 'copter park. Two machines were parked there—one, a heavy duty 'copter for transporting freight, and a smaller one, for personal use.

Around the field, on its perimeter, were half a dozen rudely made sheds.

I shivered in the unusual chill. "Where's the ship—in the machine shop?"

Cleo shook her head. "It's far too big. He buried it—"

She gestured to the mountain slope,

where drifts of rubble, great boulders, and snow, created a fantastic moon-escape of tumbled proportions, an uneven talus perhaps a thousand feet deep. "They turned nuclear weapons on the mountain to create the slide."

I was stunned. I could visualize slashing rays, beams, I don't know what, carving at the rocky face of the mountain, the great mass of detritus falling, sliding, rushing down upon the spaceship. What a ship it must be, how well anchored, to have withstood the hammering rush of millions of tons of rock.

"There's a tunnel leading to the ship," she went on. We walked in the direction of it. "Of course, it's disguised as a mine. Roy even has a claim, properly filed, and all the papers. It's supposed to be an exploratory shaft, in search of a vein of uranium."

We stood at the tunnel entrance. A shaft, rigged with an elevator, went down and down into blackness. The machinery whined and grumbled. The elevator came up with a group of men.

"Roy runs his crew in shifts, around the clock. They're very close to completing their work." Her look clouded. "Now that Bilfax has located the ship, Roy is driving himself..."

WILLIE detached himself from the group and approached. "Our shipment has come in. I'm going to town and pick it up. Anything you'd like?" He was looking at Cleo, and he didn't look like a superman.

"No..." She hesitated, shrugged. "Never mind. I almost thought of going with you."

"I'm afraid," said Willie, "it wouldn't be wise."

"Any objection to my going?" I asked. I was looking at Cleo, too; I had an idea, one I had nourished since yesterday.

Willie inclined his head, seeming to

consider. "Roy says it's all right. Come along."

We left Cleo standing by the shaft, slim, straight, crowned with flame. Had I any right to carry out the thought I was thinking? And suppose it didn't work out? It was worth trying, maybe...

Somebody had started the small 'copter for us, and the atomic jets on the rotor tips began to howl as they warmed up.

"How did Roy know I'd want to go along?" I wanted to know.

Willie grinned—the kindly grin of a man toward a dim-witted ape. "I told him." Then, seeing that I was still blank, he laughed and pointed to his left ear. "See that button?"

It nestled in the hollow of his ear, almost invisible.

"What is it?"

"You might call it a...telepathor. It's a telepathic device—common with us. It takes the place of your videophone service—somewhat."

"I shouldn't think it very private."

"Perhaps not, but it is. It works through the center of will in your mind. You can communicate with a whole group at once, or individually. You have complete control. And it can't be tapped, like videophone wires."

"It would be worth a lot of money..."

"You think so?"

"Why not?"

"Introducing the telepathor into your culture would throw your entire communications system into confusion—panic! Who would ever make another videophone call? There's a lot of money *there*, too, you know. Do you think you could promote this..." He touched the button in his ear. "...against that kind of pressure?"

I saw what he meant.

"Your culture isn't ready for the telepathor," he said, "or anything else we could offer. A technology like ours

has to be grown up to; you can't have it thrust upon you."

"We aren't so dumb!" I defended weakly. "I know you think we're apes, and maybe we are, compared to you. But we've got *some* sense of our own!"

He looked at me pityingly. "You are as intelligent as I, Gil, perhaps more so; but intelligence, beyond a point, means nothing. Cultural background means everything. It's a matter of time... of slow growth. We used to think that everybody in the galaxy ought to be at the same cultural level. We tried to correct the disparity we found everywhere. It didn't pay. Either the culture collapsed completely—or a worse thing happened." He frowned. "There's a gap between us, Gil, that you aren't ready to span... yet."

He spoke in much the tone of a kind but stern parent pointing out to Junior why he can't have coffee at meals. I felt then less like an ape and more like a child. I was grateful to Willie for that.

I HAD NO difficulty getting away from Willie. He expected to spend a couple of hours transferring the shipment from the freight warehouse to the 'copter. I told him I want to look the mountain town over, and simply walked away.

I knew I was being followed almost from the moment I left the 'copter park. Could Willie have detailed a man to watch me? It occurred to me, too, that it might be one of Gregor's men, or Bilfax's. Whoever he was, he was good; I couldn't pick him out of the throng jamming the streets behind me.

I went into a drugstore and asked directions, keeping an eye out through the show window, and still I couldn't spot my man. Armed with information, I went on and found my way to Videophone Central.

I put in a long distance call, collect,

to Johnson, the B. I. S. agent. It was time I was making a report.

Johnson was out of town, I didn't trouble to talk with anyone else, left my name and said I'd call later. I broke the connection, feeling the first assault of despair. As I stepped out of the booth, a man loitering nearby laid a heavy hand on my arm. "You're Gilbert Bradley."

He was big, and he looked tough. I don't tangle well when they come as big as that one. I started to back warily away, to disengage my arm from his grip. He hung on, flashed credentials. "Smith, Bureau of Internal Security. Come along."

I went. Johnson was doubtless behind this, and I began to have hope. I asked, but the big lug I was with wouldn't open his mouth. Secrecy beyond the call of reason is the trouble with these security boys. They wouldn't tell a blind man the right time of day.

Johnson was behind it, all right, directing operations from a room in a second-rate hotel near the airport. He acted glad to see me. That is, he almost smiled.

I said, "I tried to call you long distance."

"I was notified; I've been waiting for you."

"How'd you know we were out here?"

"We keep tabs on Gregor."

"So Gregor's around."

"If my man hadn't picked you up, his would have. Any thanks?"

"A million. For what?"

"Remember Henderson?"

"I'm remembering; I'm also thinking Gregor is a foreign agent, so why do you let him operate?"

"He runs loose. We see he doesn't operate. Do you think we're asleep on our feet in the Bureau?"

I had no answer for that question, so I told him about the fracas in my apartment and our sudden flight.

He nodded, as if the news were old. "Your place was thoroughly messed up; your rental agent is still hopping. We got it from a routine police report. It may interest you to know we've slapped a hold order on Coleman's theatrical equipment."

"His agent was supposed to pick it up."

"And destroy it. We've got *him*, too. He's nobody, but he can't talk where we've got him. Government experts are looking over the stuff."

"They won't learn anything."

"Think not?"

How could I tell Johnson about the gap that Willie had made me see so clearly? I unloaded the rest of my burden. I told him about Coleman's alien origin, the interstellar war, Bilfax and the buried spaceship.

HE WAS frowning when I finished. "I don't mind telling you—now," he said. "We had Coleman cased for an extra-terrestrial. Don't ask me where the idea came from. We've got bright people in government service, too. In fact, we're almost ready to hit the open road to space ourselves. Remember the rocket, with the magnesium flare, that reached the moon? But this interstellar warfare business sounds like romancing. Sure it's straight?"

"Honest to God! I've met Bilfax. He has a mission—to capture or destroy Coleman. Now that he knows where Coleman's spaceship is hidden, he's bound to try one or the other, soon."

Johnson was thoughtful, noisily sucking his yellow teeth. "Exactly where is the spaceship buried?"

I told him.

"We've got to prevent that take-off, Bradley!"

"Don't include me, Johnson. I couldn't stop that take-off with an H-bomb. Nor anybody else—except, maybe, Bilfax. Coleman's got it sur-

rounded with a force shield nothing can penetrate. Nothing *we* have. Besides, I'm not interested in stopping Coleman's flight."

"The United States Government *is*. We want what's in that man's head, and in his ship; you can't buck the government."

"I'm not bucking. I'm as patriotic as you are. If I thought Coleman's leaving a danger to our country, I'd be as anxious to stop him as you are. Patriotism doesn't mean anything here, Johnson. Coleman's different from us; he's big. I've never seen his ship, but I think it could handle our entire Navy, the air fleet, and the Army thrown in. Including the Marines."

"Our technology doesn't equip us to deal with people like Coleman. If he can get that ship out of here before Bilfax moves to stop him, more power to him, I say. If Bilfax beats Coleman to the punch, I hate to think what will be going on up there in the hills—and me in the middle of it. Besides, Cleo Parker's up there. I'd like to get her out before the fireworks start."

"If you're interested in the Parker woman," Johnson said bleakly, "she's your look-out. We'll let Washington decide what *we* do."

I didn't like the way he tossed off that "Parker woman" business.

"She's an American national, Johnson!"

"So is everybody else in this part of the country. We don't want lives endangered, Bradley, and we *do* want what Coleman knows. Knowing he's an alien, illegally entered in the country, we can arrest him; that's why we've got to stop that take-off."

"You'd turn Coleman over to Bilfax!" I accused.

"Maybe, after we're through with him—if it would keep an interstellar war off our doorstep."

"So now you believe in the interstellar war?"

"That's up to Washington. You say Coleman is about ready?"

"Willie is picking up the last shipment of stuff Coleman needs."

"Get on that ship, Bradley! Prevent take-off if you have to throw a monkey wrench into something."

"Suppose I can't?"

"We'll do the worrying. Smith will take you back to the 'copter park; that's to keep Gregor from snatching you and fouling things up. I'm putting out a pick-up order for him and his crowd. He's no good to us any more." He showed a yellow-toothed grin and handed me a pistol, butt first.

"Take care of yourself, Bradley!"

I took the pistol, wondering what earthly use it could be to me. But I knew what it meant. Johnson had washed his hands of me; I was on my own. If I did what he wanted, so much the better. If not, he had other plans that didn't include me.

As for Cleo, she was my look-out, then. All right. I had betrayed Coleman for a purpose, and the purpose had backfired into my own lap. I had thought maybe Johnson would cooperate—I didn't know just how. He might have walked in, slapped a restraining order, or something, on Coleman. That part of it didn't matter. But he *could* have claimed me and Cleo as nationals. *I didn't want Cleo to leave Earth with Coleman.*

All I wanted for Coleman was to see him headed safely for Aldebaran, or Sirius, or wherever he came from. Coleman was great, but he wasn't a man—not as I knew men. Whereas, Cleo was a woman, as I wanted with heart and soul to know women.

6

I GUESS Gregor's organization was almost as good as Johnson's, because the B. I. S. man didn't get to follow through on his pick-up order.

The strange 'copter intercepted us, Willie and me, about five miles from town and followed at a respectable distance. The two crewmen with us pointed it out.

I said, "It seems to be following us."

Willie shrugged. "I reported it to Roy; he says pay no attention."

I wondered if it could be Johnson, falling in with my plans. Willie was tight-lipped and silent all the way back. When we landed, I knew the truth.

It wasn't Johnson's 'copter; it was Gregor's. He came down with us and settled on the park. Then it was all up with Gregor. Four or five of Coleman's boys charged up, opened the 'copter and yanked Gregor out.

I walked over with Willie.

"Well, well!" I said smugly. "Willie, do you know this chap?"

"Slightly," Willie replied crisply. He tipped his head, and the group holding Gregor started off with him.

"Wait!" shouted Gregor. His fat face was damp and shiny with sweat. He was heavy and hard to handle, and he flailed his arms free. "I got to see Coleman!"

"You'll see him," Willie promised coldly.

They dragged him away, protesting.

I said, "He can cause trouble."

"Not any more: I was hoping it was Johnson."

I pretended ignorance. Willie favored me with a glance as cold as the one he had bent upon Gregor. He reached under the lapel of my jacket and plucked forth a tiny, button-shaped object on a pin. He showed it to me before putting it in his pocket.

"An audio-pickup, Gil; I've got the receiver here." He tapped the same pocket. "We know all about your conference with the American agent."

I couldn't say anything. Like many a rat caught at conniving, I felt indescribably ashamed. I wondered what

all I had said to Johnson, if Coleman could have read my motive from my words.

We walked across the field. "Sometimes it helps," Willie said, "to have a cultural lineage that reaches far back."

I dared to look at him.

"You learn tolerance, forgiveness. Roy doesn't blame you, Gil; neither do I. What you did was natural."

"Cleo..." I croaked.

"I passed your conversation to Roy. I left out that part of it."

I had been demoted from my status as child to the man. I was the gibbering ape again.

I learned later from Cleo that Gregor had come to offer money for the scientific information he wanted. He didn't know about the ship. He thought the surface installation was all there was, and Roy was some kind of an inventor. He wanted Roy's inventions for his country.

I mulled that over. Gregor was a patriot, too, in his way. Where do you draw the line between patriot and spy? At the national boundary, of course. Johnson was the patriot, I the spy.

"He offered more than ever before," she said. "Roy said no, of course."

"Where is he now?"

"Gregor?" She nodded toward our living quarters. "Roy had him locked up. We'll keep him there until the ship is ready to leave to keep him from being a nuisance."

I told her Gregor had offered me money to work for him. I was checking to see if she had heard about me and Johnson. She hadn't.

"I'm not surprised," she said. "I told Roy we could trust you."

If I needed anything more to drive me down to the height of my shoe-tops, that did it.

THERE WAS a great deal of scurry all afternoon, moving things from

the surface, down the tunnel. Roy was breaking camp in earnest. I became more and more anxious as time went by.

About nine in the evening, I was sitting with Cleo in the rec room. The air felt strained, tense. That was partly caused by the force shield. It wasn't a thin film surrounding us. It was a solid field, around and through us. The nervous system responded to it.

Willie prowled nervously. Often he cocked his head to one side, in a listening attitude, communicating with Coleman in the ship. Work was drawing to a speedy close. And other things were brewing...

Willie flat-footed across to us. "Roy says for you two to go to the ship."

I gaped. "Me, too?" I was haunted by my betrayal. Did Willie know there was nothing I could do to sabotage the ship?

He looked at me with indifference. "You don't have to go, but Roy thinks Cleo will be safer." He struck a thumb upward. "Bilfax is up there."

He turned and strode rapidly outside, an urgency in his demeanor. I took Cleo outside. A strong wind was blowing off the mountain, and it was cold. The dark firs sighed in the night. A big moon was up in the east, flooding the valley with molten silver. The air was filled with reflected snow-shine. I looked up and saw Bilfax's strategy.

He didn't come soaring in, slashing with the superpowered weapons of his battleship; he did as military strategists have done since time was. He sent in shock troops—the only power there is that can take a position impregnable to heavy weapons.

The air was filled with dark dots, dropping from the stars. They had no parachutes, but I knew they had something else that was better. They came down swiftly, in controlled fall.

Men rushed about the 'copter field. The shacks around the perimeter had

fallen apart, and I saw now that they had contained weapons, of what type or power I could only guess.

A humming rose over the wilderness, and some of the dark dots in the air blossomed into fiery flower with a dull booming sound that rolled back and forth between the peaks hemming the valley.

Bilfax's men came down in a steady rain, purposeful, relentless. Most of them landed, disappearing on the slope below the 'copter field. There must have been two hundred or more of them, and there were scarcely two dozen of our own to man the defenses.

Bright lances of flame darted from the dropping dots and spent their energy on the outer skin of the force barrier. From the forested slope, too, bright flashes winked where the first comers were consolidating their gain.

Bulky parcels dropped with the dots—heavy weapons—and soon flame gushed in streams from the woods. Lightnings played across the field, dazzling the eyes.

I hustled Cleo up the path toward the "mine" entrance. We reached it, and I handed her onto the elevator stage. The shaft was a black hole in the black of night, under the waving, black silhouettes of the firs.

We could still see the battle, and it seemed to me that the flashes from the lower slope were drawing closer to the defending group.

ALL OF A sudden, I knew that I had no right to go down to that ship buried in the rubble. Whatever I had committed against Coleman had been very small indeed; and whatever I could do for him was even smaller, but I must do it. I had tried to take Cleo away from him—God knows, I had. There was no use trying any more. Now was the time to acknowledge my failure, my mistakes. I capitulated to the man from outer space.

I thrust Cleo from me. "Go to your husband!" I said curtly. "He's waiting."

I strode back the way we had come. The air crackled, like the air in a forest fire. Intolerable heat washed up from the conflict, the residue of dissipated charges fired against the protecting field of force. The 'copter park was bright as day, laced and interlaced with a hissing craze of energy.

The enemy was concentrating fire on a single point of the barrier, and the air glowed white hot there. The air reeked of ozone, stinging my nostrils and burning my lungs.

I slipped down the steep slope, grasping shrubs, crouching low to avoid becoming a target. I reached the edge of the field and stumbled over a body.

He lay dead on his face, both arms outflung; half his mid-section was gone. The screen wasn't entirely impervious, then. I turned the man over. It was Willie. A spasm of sorrow wrenched me.

The glare crackled and blinded. The defenders milled in the midst of lashing energy streaks, steadily losing ground. The installation was on fire. Flames towered from the machine shop, whipped in the wind and engulfed the living quarters. Sick, I thought of Gregor imprisoned there, perishing, another ape paying the price for having jostled with men.

The crackling hiss of a stray needle-bolt brought my senses back. A thought occurred to me. I bent low, groped at Willie's ear. My fingers found the little button of the telepathor. I slipped it into my ear.

"Hold out a little longer..." I recognized Coleman's... *personality*. There was no voice. A strong thought engulfed me, and it had meaning. I was unskillfully a part of the telepathor hook-up.

I felt strange, big-headed, thinking with many minds at once. Alien

thoughts crawled in my brain, sidled through my understanding. I couldn't grasp them. I was still an ape, playing with a vid-ophone, punching numbers at random.

What seemed like a voice said, "Is that you, Gil? What happened to Willie?"

I told him what had happened to Willie. I didn't know how to direct the message to Coleman alone. Everybody on the ship and on the field got it. There was sadness in my being from Willie's shipmates.

Coleman said, "Where is Cleo?"

"Coming down the tunnel. I sent her in."

I felt a wave of what I can only call *friendliness* sweep over me.

'Get out, Gil! Climb up the mountain and wait for our take-off. When the shield goes down, get over the ridge. You can't help. Don't try.'

Then a medley of alien thoughts replaced the clear-cut communication and I knew Coleman had turned his attention to more immediate problems.

The defenders were still pulling back on the field. They were fewer than they had been. Dark dots of the enemy moved at the far side.

I cuddled my useless pistol in a sweating palm and retreated.

"Gil!" Cleo ran toward me along the path. We collided. I gripped her, held her close. I was too winded to speak. Already, the defense had collapsed, and Coleman's men were racing toward the tunnel.

I gripped Cleo's arm, forced her with me, straight up the slope, through ripping underbrush.

"Gil!"

"Keep moving!"

"The ship, Gil! *The ship...*"

Suddenly, the electric tension was gone from the air. I looked back. Helmeted enemy troops were streaming after the retreating defenders. Needlebolts crackled both ways and men dropped.

"Too late!" I wheezed.

THE SHIP was ready, warming its generators. I got that through the telepathor. The dark pool of the enemy swirled, seemed to suck upward in response to some unheard command. Black dots shot into the air and disappeared against the spangled sky that was like sapphires in a sea of milk. And the moon shone with a bright, unwavering radiance.

I heard heavy movement in the underbrush. Cleo gasped. I crouched, pulling her down beside me. A voice carried clearly. "Step along, now!"

That was Johnson's voice. I yelled, "Johnson! Keep back!"

The brush crashed in separate noises that converged on us. "You, there! Is that you, Bradley?"

I was shaking. Cleo trembled under my hand. The firs around us quivered from roots to tips. The whole ground shook with a deep, steady tremor.

A vast humming rose from the valley. Rock began to slip with thunderous crashings. The hum deepened. A slide started somewhere above us, above the timberline, and poured below into the valley.

"My God!" said Johnson. "What's happening?"

I yelled to be heard. "The take-off!"

Tons of rock moved, grinding together. The talus at the foot of the mountain stirred. Spouts of rock lashed into the air, like spume from an angry sea. A ship I had known it to be, buried there in the rubble. But what a ship!

It was a quarter of a mile long. It seemed to thresh among the thundering boulders like a wounded whale. Dust rose to hang like an opalescent veil in the moonlight, dimming the view.

I shivered with excitement to see its shape flashing there, urged upward by an invisible power without parallel.

I heard from Coleman once more, as the ship floundered out of the restraining detritus. "*Take care of Cleo, Gil!*"

That was all.

The great ship shot into the air. Crumbled stone dripped from its shining flanks like Niagara. The air-tremoring hum swelled to a fantastic, ear-splitting shriek and diminished to silence in the sky.

There were muttered curses from Johnson's men. The B. I. S. agent didn't have anything to say.

The ship was gone. The sound of its passage had rumbled and screamed into nothing. I watched the sky, head tipped back, and Cleo gripped my arm.

"They're in space," I said quietly. "Roy is jockeying for position; Bilfax is closing in."

I got that from the telepathor. There was nothing to be seen overhead but the milk and the sapphires, and the dead moon shining across the air. Inside my mind were confused glimpses of a complex control room, machines that whirred, throbbed, and glimmered in the shine of shielded lights, men weirdly strapped into bizarre...

SOMEWHERE, thousands of miles distant in airless space, the two ships closed in combat. All was confusion in my mind, disjointed, nightmarish. I thought of lashing beams of energy, of self-guiding missiles of enormous power.

Then, suddenly, the confusion in my mind broke off. There was nothing. Simultaneously, among the stars, a nova flamed briefly, brilliantly, and went out.

Johnson was cursing now. I don't think he knew why.

Cleo screamed. "*I saw it! I saw it!*" She fell against me, holding on hard.

"Gil, oh Gil! *Which ship was it?*"

"I know," I said. I plucked the

telepathor from my ear, held it out for her to see. She would recognize it, know that I knew. "Bilfax," I lied.

"He'll come back! Roy will come back to me, Gil!"

"Sure," I said clumsily. I squeezed the telepathor between thumb and finger and felt it crumble. "He'll come back, Cleo."

I have always been proud of that lie. The lie made it easier for her to bear her loss; and it made me see something, too, that I had overlooked—that we are no more apes than Coleman was a superman. The spirit of man is measured, not in the works of his hands nor the thoughts of his brain, not in his success or failure to cope with environment, but in terms of the goal he dreams of, and the struggle he puts forth to gain it. Coleman taught me that.

We went back over the hump of the mountain, the way Johnson had brought his operatives in. He had come too late to prevent the take-off, and chagrin kept him silent as we 'coptered back to town.

Cleo refused to go back on the stage. She couldn't bear it, without him; all she lives for now is the day her husband returns, and she dreams of him wandering the silent space trails.

I got her a job writing copy for another agency in town. She's good at it, and satisfied. Sometimes I drop by her apartment in the evening, and we drink a toast to the man I keep hoping she will forget.

After all, I can't help remembering that Cleo didn't go down that shaft and on to the ship when I pushed her away from me. For a crucial moment, she had let a spark of concern for me lead her away from the man she loved ... to safety.

Someday, maybe, that spark will flare up again, grow big enough to engulf her, and she'll return fully to her own.



STORY RATINGS

BY THE time you read this, the worst of summer will be over, but today, June 18, is a record for humid discomfort—one which I hope will not have been broken between now and September. Bear with me; you'll see a regular editorial in the November *Science Fiction Stories*.

Now and then, I've noted requests for a restoration of "The Reckoning" in this magazine, as well as in *Science Fiction Stories*, and *Future Science Fiction*; this comes to what's left of my melting mind at the moment, because three such requests arrived in last week's mail.

I'm all in favor of it; in fact, I abandoned "The Reckoning" with considerable reluctance a few years back. A department of this nature always appealed to me, back in the days when I was only a reader and fan. I was curious as to how the consensus on an issue squared with my own feelings. Sometimes I'd find that my own favorites came out on top, sometimes I'd think that the other readers had pretty poor taste; but the ratings were always something I awaited eagerly.

There have been various systems used by editors for tabulating votes, but I think the one devised by John W. Campbell Jr., and still in use, is about the best. Say there are five stories in the issue; that means that a given reader *could* rate them from "1" (indicating first choice) to "5" (indicating last choice). This doesn't mean that a reader *has* to list all five stories, or that he couldn't give any of them tie ratings. For example, if you thought two of the stories were really excellent, and the other three pretty sad, then the sensible way to make this system express your feelings would be to list the two top ones

"1", and the other three "5". Where a reader comments on stories, but doesn't make any definite rating, the editor deduces the ratings as well as he can. All the points for each story are totaled, then divided by the number of votes received in each case. The lowest point scores indicate the highest ratings.

This is the method I used when we ran "The Reckoning", but I added one feature; the system, as described, does not allow for the difference between a story which just came out in last place, and a story the reader thought poor or bad. Thus, I suggested that readers identify any stories in the issue they disliked as "X". An "X" rating would get a numerical value of "6" in the example—one point more than the total number of stories.

It might be a good idea to allow for the difference between "best in the issue" and a story which the reader considers particularly outstanding. Such a story could be designated as "A" in the rating, and would receive a numerical value of "0" in the accounting. (Remember—the lower the numerical score, the higher the story is going to come out in the summing up. An ideal issue for a reader would be one where he rated all the stories "A".)

Why was "The Reckoning" abandoned? For a simple and melancholy reason—I wasn't getting enough votes in.

So I say unto you who would like to see "The Reckoning" restored, send in a postcard or letter after you've read each issue; it *helps* if you rate each story, but this isn't absolutely necessary. I'll include a reckoning for each issue on which I receive enough responses to allow for a reasonable sampling. Fair enough? RAWL

THE CONDUIT

Novel by NOEL LOOMIS

No doubt, you've read stories about brilliant young scientists who saved the world by instituting man-made cataclysm. And the stories wound up with our handsome young hero hailed as the Saviour of Humanity. Well...if such events actually happened, what most authors forget is that our Hero may find himself up to his neck in real trouble!

(illustration by C. A. MURPHY)

TOMMY DISTAL, grandson of the legendary A. P. (Atom Power) Distal, alighted from a pneumatic car at the passenger ramp in the lobby of the API Tower in Cleveland. Even here, he noted with a feeling of irritation, the Conduit dominated, just as it dominated all of North America—for the upper half of the long south wall of the lobby was filled from one end to the other with an animated panorama of the big pipe, and the simulated reflection of sunlight from its great sides shed a silvery luminance over the entire course.

"Ten thousand miles of eight-foot silver pipe," he thought, "carrying ten billion amps of juice at nine hundred thousand cycles and two hundred billion volts—at once the most beneficial and the most ominous factor on the continent."

He shrugged and turned away. He was almost tall enough to look over the heads of the crowd at the great spiral escalator. He was huskily built and had clean, honest features; he walked across the big lobby with a spring that suggested long-leashed

energy. But it was energy of determination; his face was grim.

He left the escalator at the two hundredth floor. The Distal name got him through three secretaries and a gold-braided doorkeeper with sharp eyes and wide shoulders.

Then he faced Doctor Reynolds, chairman of the board of Atompower-inc, in his great glass-and-magnesium office. For a moment, Tommy was bewildered by the array of video screens, humming teletypes, pulsing graphs, and the enormous reflectionless window that formed the entire north wall. Then he advanced across a luminous glass rug, whose thousands of tiny mirrors and prisms showed many-colored rippling lights that seemed to move with him.

From beyond a huge flat-topped desk, Reynolds said pleasantly, "I'm happy to see you here, Tommy. I rarely run into you unless you come to the house for a date with Sharon." Just a shade of wariness came into his blue eyes as he added, "I presume you are here on business."

"Yes, sir; I want a job, Doctor Reynolds. I want to make some money.



At first glance, the creature looked like a huge Gila monster.

I'm tired of going to school and accumulating useless degrees. I'm over thirty, and I'd like to go to work; I don't like being a part of the lost generation." A note of humor came in his voice as he added, "If it isn't asking too much of society, I'd like to be called 'Thomas' or 'Tom' once in a while, instead of 'Tommy'."

Reynolds' piercing blue eyes began to pick up interest. For all of his hundred and thirty-six years, he sat quite erect. He said with mild astonishment, "Did you say something about a 'lost' generation?"

"Yes, sir; That's what they've been calling us on the video."

"What does that mean?"

TOMMY DREW a deep breath. Reynolds was a very busy man, and it was quite possible that he really did not know the situation. "The Osterhus rejuvenation, doubled the length of life of men in your generation. Older men hold onto their jobs, and there's nothing for men of my age to do but go to school. Older men get all the jobs; the emphasis is on age and experience."

Reynolds looked at the younger man speculatively. "Your time will come. My generation won't live forever." Distal shook his head. "I'm afraid our time *won't* come, Doctor. By the time your generation begins to retire, those of my age will be middle-

aged men without experience, and the generation after us will get the jobs." He leaned over the glass desk. "I tell you, Doctor Reynolds, by making men live longer Osterhus has rendered one entire generation unnecessary!"

Reynolds looked momentarily uncomfortable. "I don't quite understand. Your grandfather left an enormous fortune, I thought. Atompowerrinc pays huge royalties for the use of the Distal tubes."

"Do you know what it means, Doctor, to have education, energy, ambition, initiative—to *want* to do something useful but not be allowed to?" He paused a moment. Reynolds' blue eyes were fixed on him. Then Tommy said more quietly, "As to money," he said, "I'm afraid A. P. didn't foresee Dr. Osterhus. He left me the family residence, and provided for its upkeep; but all the money is in a trust fund, and all the royalties go into it, too. I'm to have control of it, at any time after forty, when I have demonstrated my stability—which means getting and holding a job that amounts to something. In the meantime, I don't get a penny."

"The government—" Reynolds began.

"Yes, the government gives an allowance to anybody who wants to go to school, but they won't give us useful jobs. Do you want to know how I make enough money to take Sharon to the Flying Gardens?"

Reynolds seemed to be trying to decide whether the younger man was entirely normal. "I'd like to hear," he said finally.

"The handyman at the Distal residence died two years ago. I didn't report it to the trustees; I took the job. I shovel snow when the sidewalk heaters fail to work; I replace broken windows and chase pigeons off the roof. I fix leaky faucets and dig into plugged-up sewers." He stopped, got his breath, looked at Reynolds; then he grinned. "You should see me with a pipe-wrench

under the kitchen sink—but I get a hundred and twenty-five a month for it."

Reynolds spread his fingers and hit the edge of his desk gently with the heel of his hand. He said as though it was ended, "Well, at least that keeps you in spending money."

Distal was tempted to give a sharp answer, but he didn't. "For a hundred and twenty-five a month," he said, "I'm assuming another man's identity and endorsing checks with another man's name. With the present laws that favor older men in jobs, what do you think will happen when they find out?" He paused. "I hope I have your confidence, sir, I have told you this only to show you what the situation is."

REYNOLDS looked up. The expression of his piercing blue eyes softened. "Perhaps I'm beginning to see what you mean. What have you majored in?"

"Electrical atomics," Tommy said eagerly. "D.Sc. from Princeton in 2080; post graduate work at Massachusetts Tech, Cornell, Brookhaven—"

Reynolds held up a white hand. "How about our Personnel Department?"

"They have processed an application from me every year for ten years; they know all about me from the day I was born; they've known I've got a string of degrees as long as the Conduit."

Reynolds still hedged. "Atompowerrinc is always well filled up. We pay well and attract the best men in the world. But surely there must be other industries not so fortunate; the new sea-mining and sea-agriculture industries are in need of help, I understand."

"I would not have bothered you personally," said Tommy with dignity, "if it were not a last resort."

Reynolds nodded slowly. "I'll tell

you what I'll do," he said thoughtfully. "There is a great need in the world today—the solution of the century-old problem of interplanetary transportation. The world has spent billions of dollars and many hundreds of lives, and so far no answer has been found."

Distal swallowed. "I'd try anything," he said, "but my training has been along other lines."

"I am aware of that," Reynolds said slowly, "but I will tell you—also in confidence—that that subject has top priority in every laboratory in the country right now. Atompowerinc has several hundred men working on it, but it is my thought that a fresh, vigorous viewpoint—" He stopped, his eyes questioning.

"I'll take it. But why is it so urgent?"

Reynolds' lips were tight as he picked up a visogram. "Every day now for over a month, Naval Observatory has reported the landing on the Moon of hundreds of monoclinic-shaped space-craft of unknown origin but positively not from this world. The UN Security Council has been in session for a week, but all they can do is speculate; we are unable to send a manned rocket to the Moon."

"How about robot rockets?"

"A good many have been fired with the idea of photographing activities on the 'dark side'—but none have returned."

"The big telescopes—"

Reynolds took a deep breath. "Without a single exception, these ships have landed on the side away from us."

"Does anybody have an idea where they're from?"

"None. Maybe from Mars—maybe from the next galaxy."

"Is there any indication of their purpose?"

Reynolds looked through the great

plate-glass windows that formed the wall, out over Cleveland toward the Canadian border. "They have been systematically scouting the Earth," he said in a low voice. "They obviously have plans—but all we can do is wait." He shuffled some papers. "Laboratory 112 will be available tomorrow. Dr. Cavanaugh is retiring; he's a hundred and thirty-two, and has applied for his pension."

"I'll be here in the morning."

"You'd better come to my office first. Laboratories are in great demand and a good many older scientists have been waiting for years; but if I can get you in there and established, it won't be easy for them to root you out. Okay?"

"Yes, sir."

Reynold sighed. "There's no use denying it. There *are* too many people in the world today. The age-level proportion is abnormal. From society's standpoint, Dr. Osterhus created more problems than he solved." He stopped to answer a magenta light on his desk.

A GIRL'S soft voice said, "Mr. Somerset to see you, sir. A matter of urgency."

"Send him in." Reynolds sat back and said to Tommy, "Stay here. You may as well meet Somerset. He'll know about it anyway."

Tommy said sharply, "Gordon Somerset?"

"Yes, he's managing vice-president of Atompowerinc—the most important position next to chairman. He's a very efficient man, and still blessed with a great deal of ambition, even though he's a hundred and ten."

"I'd better—" Distal stopped, for Somerset was striding in, a tall, gaunt man with angular jawbones and hair that was still black.

Reynolds said, "You know Tommy Distal, Gordon? I've just decided he's entitled to a break and I've agreed to

put him in for some research work on IP rockets."

Somerset scowled and seemed to swell up a little. "Distal?" He did not offer to shake hands. "Is this the scion of the Distals?"

"Tommy is A. P.'s grandson," said Reynolds.

Somerset stared at Tommy. His lips twisted a little. He said, "So you're the grandson of the man who cheated me out of my invention."

Tommy sucked in his breath.

Reynolds looked shocked. "Hold on a minute. I didn't realize—guess I had forgotten. Anyway, let's don't fight it out here. Sorry, Tommy."

"That's okay," Tommy said stiffly.

Somerset glared at Distal, then the gaunt-faced man laid a sheaf of thin metallic forms on Reynolds' desk. "New problems have developed on the Conduit," he told Reynolds tersely.

Reynolds was glancing through the forms. "Ten laboratories?" he asked. "It must be serious." He signed the forms. Then, as he handed them back to Somerset, he paused, glanced at Tommy, then asked Somerset, "Is No. 112 included in those, Gordon?"

Somerset took the question in and seemed to digest it. He must have figured out its implication, for he grinned and showed white teeth with shrunken gums as he said, "I am assigning it to my son Richard. In fact, knowing that you would have no objection, I sent Richard this morning to take over from Dr. Cavanaugh."

Tommy started to speak, but he closed his mouth before there was a sound. Somerset swung with his back toward Distal and strode out.

Reynolds was shaking his white head. "I'm sorry about that, Tommy; I forgot about Somerset's legal actions. What's the basis of his claim anyway?"

"He was an assistant in my grandfather's laboratory and did a great deal

of the actual work on what came to be the Distal tube to provide unlimited quantities of electric power; but he never has produced any evidence that he originated any of the ideas. I personally feel sure he did not—I have all of my grandfather's notes, and grandfather was a very conscientious diarist. He mentions various of names in connection with his work, and he speaks of Somerset—who at that time was a young man—but never does he hint that any of the basic ideas on the Distal tube came from Somerset."

"Can't you settle these suits with his notes?"

TOMMY shook his head. "Somerset denies their validity. He claims that the only notes grandfather kept were those he made in the laboratory—which have been introduced in evidence but which are nothing but accounts of experiments. The real notes grandfather made—in which he talked about the men who worked with him, and about speculative subjects and so on—were made in his sleeping room in the form of a diary. It is those we haven't been able to introduce, because they are self-serving and because only I have any actual knowledge of their being grandfather's work. At least, Somerset denies it, though I do not see how he could have failed to know about them—he often went with grandfather to his room after they left the laboratory for a late discussion."

"Is there a serious possibility that Somerset will win his action?"

Tommy nodded. "They expect a final hearing and decision in federal court this fall, and Mr. Crawford, executor of the will, seems worried. He says that in these cases, where a lot of money is involved and a great deal of testimony introduced, it sometimes becomes so confusing that it might go either way. And of course if it goes to Somerset, it will wipe out the trust fund grandfather left for me."

"Is that considerable?"

Distal raised his eyebrows. "Over a hundred million, I hear—not that it means a penny to me until I can get a job somewhere and make good under the terms of the trust."

"What do *you* think of Somerset's claim?"

"Grandfather would never have stolen anything from anybody and some day I'll prove that. Somerset is just determined to get his hands on the Distal estate. He's been after it so long, that he may really believe by this time that the basic ideas for the Distal tube came from him."

"It's strange he didn't bring suit before your grandfather died—or is it?"

"He has a good story for that; he claims grandfather promised to make everything right in the will"

Reynolds murmured, "Somerset is a very ambitious man."

Tommy sighed then and looked up. He sounded discouraged. "Now that Laboratory 112 is taken, I suppose I'm not working for API any longer; but if there is a serious problem in connection with the Conduit, do you suppose you could tell me about it? All of my education has been spent with the idea that some day I would use it on the Conduit, and if you could give me a hint," he said with a forlorn hope in his voice, "maybe I could work out something. I've used most of my janitor pay to rig up a laboratory in my basement. It's mostly home-made equipment, of course, but—"

2

REYNOLDS looked at him with admiration for the first time. "If you're that earnest, I don't see why you shouldn't know. It will become public knowledge sooner or later anyway. It's about the current in the Conduit."

Tommy Distal's eyes opened wide.

"Could it be," he asked softly, "that you can't turn it off?"

Reynolds looked surprised. "What made you guess?"

"Grandfather discussed that possibility in his diary."

"I didn't know that. It's never come out. Why didn't your grandfather bring it up? He was one of the organizers of Atompowerinc."

"I rather think, that it was a combination of circumstances. You see, he didn't figure that the current would be self-perpetuating until it reached upward of a hundred billion volts; and there was no reason at that time to believe anyone would make it that powerful, because there was no foreseeable use for such power. Also, you remember the election of 2054?"

"Vaguely," said Reynolds.

"At that time, the world was faced with the exhaustion—or potential exhaustion—of coal and other fuels suitable for production of power. A departure had to be made—a radical departure—and the Distal tube was the answer. If you remember, President Fletcher was elected on his single-power-plant program. But there was severe opposition from many sides, and I think grandfather kept still about the danger of the Distal tube in order not to jeopardize the success of the program. His notes indicate that he expected to reveal the danger, and to provide against its happening—but he died about the time Atompowerinc got well under way. I was in high school then, and grandfather died in the jet-crash that also killed my father and mother."

Reynolds winced.

Distal went on steadily after a moment. "Somerset started litigation as soon as the will was put on probate; and we have not made the contents of grandfather's diary public, for fear of being accused by Somerset of bringing undue influence."

"I see," said Reynolds.

Tommy was looking away into the

distance. "Do you suppose you have created power of a cosmic order—power that has broken down all resistance in the pipe?" He looked up abruptly. "Can't the feeder lines drain it off?"

"Drain off two sextillion watts? Do you know the power requirements of North America?"

Distal nodded slowly. "That's right. I remember when you first built the pipe there were two things I didn't understand: first, where you would get the silver—"

"The body of the shell is magnesium," said Reynolds. "The silver is only three atoms thick, for the charge is carried on the outside, of course."

"The other question was: why should you create a hundred million times as much power as the country could use."

"There was a great deal of argument about that on the board. Somerset led the fight for the extra power. His argument was that with the Distal tubes the output increases on an exponential curve while the costs decrease on a minus exponential curve. At that rate, the next ten billion watts cost only the square root of the last hundred thousand."

"Somerset owns a large block of stock in API, doesn't he?"

"Yes."

"Then Somerset's motive is obvious," Tommy said as if that settled it. His voice changed. "How *could* you go about controlling a current like that? Could you ground it out?"

REYNOLDS looked at him quizzically, and Tommy Distal knew that Reynolds and Somerset had already discussed the part. Reynolds said quietly, "Would you take the responsibility of grounding two hundred billion volts into the earth?"

Distal stared for an instant. Then Reynolds began to fade from his sight, and in his mind Tommy was seeing

symbols, equations, graphs. "We don't know too much about electricity yet," he said as if to himself, "especially at extreme pressures. We do know that all kinds of chemical and physical actions take unexpected turns and develop unpredictable characteristics at high pressures or high temperatures."

"On Earth we have very little knowledge of extremes. Our temperature range is from about zero Kelvin to six or seven thousand degrees Centigrade, while temperatures in stellar nuclei may reach twenty million or more. Electrical charges there also might reach voltages comparable to the Conduit—real cosmic lightning—but as to the power of electricity at two hundred billion volts we have no remote conception. The energy of an electron increases with its speed; but as the speed approaches light-velocity, it increases enormously faster. It might be that way with electricity; in fact, it must be that way. That enormous voltage created by the Distal tubes has destroyed resistance in the Conduit, and presumably the current will flow forever." He nodded absently. "Yes, sir, I see what you mean. Current of such a high order undoubtedly might conceivably wreck the Earth itself."

A bell tinkled. Reynolds looked up. "Emergency video," he said.

Tommy arose. "Well, Doctor, thanks for giving me the job, anyway—even if Somerset did jerk the lab out from under. You did what you could." He felt dejected. "If anything *should* come up where you can find a place for me—"

Reynolds held up a finger. "I'm interested in your slant on the Conduit and I want to talk a little further. Wait a minute, until we see what's coming in."

A red light was blinking on the south wall. There were four video screens on the wall—two large ones, and two about eight by ten feet. The light was blinking over the right-hand large one. "That's a network screen,"

said Reynolds. "The smaller ones are private wires."

A picture came on. It was an odd picture. The transmitter was being carried through a forest in the mountains. The person who carried the transmitter was frequently walking backward to keep away from a turgid brown cloud of gas that rolled and spread.

A tense voice said: "Good morning, ladies and gentlemen. This is Clark Hughes speaking for U. S. Video. This is an emergency broadcast on all wavelengths, authorized by the FCC, in conjunction with all major networks. A grave problem has arisen in Vermont this morning which may threaten all America. The President, who will speak later, will advise alertness and caution but will request that all citizens stay where they are until authorized to move."

Distal shot a glance at Dr. Reynolds. The elder man was leaning heavily on the desk, his eyes fixed on the screen, and Tommy knew that this was something Reynolds had feared.

"The brown cloud before the transmitter," the voice went on, "apparently is a cloud of radioactive bromine. It is not known how the cloud is produced, but it covers a ten-square-mile area in the Pemigewasset Wilderness in Vermont—including the village of Lake Hamilton—and has arisen since the landing of some ten or twelve monoclinc-shaped space-craft from the direction of the Moon during the night."

TOMMY watched the swirling brown cloud on the screen. His fingers were tight on the edge of the desk.

"It is not known what kind of beings were in the space-ships, as the bromine cloud has obscured all views from a distance, and no person has come from within the affected area. A number of exploring parties have been sent into the cloud by Defense officers, but have not returned. All communications are

smothered with the advance of the cloud, and it is believed that all humans in the area are dead. A television camera dropped by mistake, and later covered by the cloud, ceased transmitting as it was obscured.

"Authorities warn that radiation from within the cloud is known as very hard radiation and that no human being can penetrate the cloud without fatal results. The President requests that all citizens remain calm, and gives his personal assurance that all possible measures will be taken to deal with the invasion!"

Distal sucked in his breath. "Did you hear that, Doctor? He said 'invasion'!"

Reynolds was shaking his white head. "I've got a job for you, Tommy. This is the real thing. It has been more or less expected, but somehow the actuality is more of a shock than I had thought." Suddenly he looked old. "The entire country will be in a frenzy within an hour. I'll need an assistant until this is over—sort of a personal public relations man. There may be a lot of different things for you to do. Would you care to take a job like that?"

"Yes, sir," he said. "I'll take it—and thanks."

Reynolds motioned to an unoccupied desk behind his own. "Use that. It's for the engineer who runs the tape-recorder when there is a meeting here in the office. I think your first duty will be to prepare a statement for the press—you know how. We can't say much except to assure them that every possible step will be taken."

"I know." Tommy went over to the desk, hung up his hat, sat down in a magnetiform chair, and drew a deep breath. For a moment the danger of an invasion, even by interplanetary aliens, did not exist. All he could seem to think was that this was his desk; he had a job. Then he pulled out a drawer and found paper. He began to write a statement.

Reynolds was answering a flood of phone calls and visi-phone calls. All incoming lines were screened by the secretaries, and reporters were turned over to Distal.

"Dr. Reynolds has expressed no opinion so far."

"Yes, he is being constantly advised."

"Sorry. The unprecedented rush of details makes it impossible for Dr. Reynolds to pose for photographers. Pictures may be obtained from our Public Relations Department."

"There is no truth to the rumor that Dr. Reynolds has left the office. He is very much on the job."

"Dr. Reynolds will have a statement by eleven o'clock. No, it is impossible for him to grant an interview at this time."

IN BETWEEN calls, Tommy finished the statement and got Reynold's okay. At eleven o'clock, he released the statement over the company teletype. In the meantime he was watching the video screens. The brown cloud in Vermont soon spread to a circular area fifteen miles in diameter and then became stabilized, roughly bounded by U. S. Highway 3 on the west and northwest, and by U. S. 320 on the northeast and east. To the south was still wilderness country.

Atompowerinc's few lines within the cloud were dead. No human being had come out of the cloud, hard radiation was constant. The Bureau of Standards suggested some sort of mesonic bombardment.

An apparently unlimited number of space-ships began arriving from the Moon and settling into the brown cloud like a metallic and ominous waterfall. The McDonald Observatory checked back on its plates, to estimate the possible number of ships that had settled on the Moon within the preceding thirty days—all on the dark side.

As the invading space-craft came within the Appleton layer, Army jet-

ships tried to intercept them, but without exception burst into flame when they approached nearer than five thousand yards. Rocket-shells fired from the ground exploded before contact. Apparently the invaders were equipped with some sort of automatically-focusing detonator, similar to the proximity fuse.

At eleven-ten, Gordon Somerset appeared on one of the video screens. Reynolds was talking into two telephones, and Tommy did not interrupt him. Somerset's voice had a gravelly resonance. "As production engineer for Atompowerinc, the sole source of power for North America," he said importantly, "have been asked what is the power situation in the face of this great emergency. I am very happy to report that, due to the foresight of the production department, Atompowerinc has no hesitancy in saying that it has ample reserves of power to supply any conceivable demand."

At eleven-fifteen the Chief of Defense said, "The enormous underground stand-by factories built long ago around Rifle, Colorado, will be in full production by tomorrow. This machinery is largely automatic, and personnel has been trained and kept in readiness by this office for over one hundred years. The country may have full confidence that all facilities will be utilized to the utmost."

Reynolds was listening to that visticast. He looked glum as the chief's square face faded from the screen. "That's all fine," he said, "and I'm glad we've got plenty of power. Maybe it wasn't so dumb for Somerset to set up that two-hundred-billion voltage after all. The only thing that bothers me is: what are they going to make out there at Rifle? They've got factories and all, but they have no idea yet what kind of weapon it will take to stop this invasion."

Distal nodded. He was answering a long-distance call from a reporter in North Umley, New South Wales. Al

ready his desk was covered with notes: "Prepare statement on ability of API to isolate lines near invasion area." "Assure public there is no truth to rumor that API lacks adequate feeder pipes from Rifle area."

HE STOPPED to hear a radio report by Planetary News: "Reports from all over North America indicate unrest on the part of the general public. A mass meeting is in progress in Chicago, where speakers are asking the question: 'What has the Bureau of Defense been doing for the last thirty days while the invaders established their base on the Moon?'"

The voice went on: "Contrary to the urging of public officials and the President, many citizens, confronted by outside danger for the first time in a hundred and thirty years, are leaving their work and gathering in the streets. This was caused at the start by the actions of a number of business houses who, faced by suspension of normal business, unwisely declared holidays. Now there is talk of 'old men' in Washington. It is a situation which may become grave."

Distal scribbled another note: "Statement that API has taken cognizance of the situation and has been working on it."

Reynolds looked at Tommy's desk and said: "You need an assistant. I'll have meetings all afternoon—the head of civilian defense, a man from the FBI—he grinned sheepishly—"they say there's some danger from rioting—a committee from Brookhaven." He leaned forward. "I have a special task for you this afternoon. Do you know anyone who could do your work here?" He nodded at the notes.

"Yes, sir. My college roommate, Art, Volson. He and I grew up together."

"Do you know where to get hold of him?"

"Yes, sir. He—in fact, he lives at my house. He does the work of a gar-

dener—not under his own name, of course."

Reynolds smiled briefly. "Quite an institution you have out there."

Tommy Distal nodded. "Art gets eighty dollars a month."

"Well, get him up here. Can you call him?"

"Yes, sir, I—" He stopped suddenly, remembering that he and Art had dismantled both the telephone and visiphone equipment in the house, only last month, to obtain experimental material. "I can run out there at noon," he said; "It's just out along the lake."

"Do that," said Reynolds. "You may as well go now, I suppose. And when you come back, stop down at the chief technician's office and see if he's got his laboratories straightened out. They were in considerable of an uproar this morning, changing programs all over the place, and I think White was upset. Don't say I sent you; just take a look around and see if he's got things straightened out. If he hasn't, I can call and offer help."

Tommy nodded, got up and put on his hat. To his surprise he was hungry.

He left by a private exit, then walked by the open door of the first secretary's office. The large room was jammed with people—some scholarly-looking, with briefcases; some in overalls; some in uniforms. Distal turned and went back to the spiral escalator.

He was down to the hundred and twenty-fifth floor on the high-speed lane when he heard his name: "Tommy!" in a throaty voice.

3

HE LOOKED fast, and saw Sharon's smooth blonde head gliding up on the opposite side of the spiral. Tommy jumped to the express lane and then to the local, and immediately crossed to the ascending lanes. A moment later he was be-

fore her, breathless. She had waited for him, and now her blue eyes glowed as she saw his excitement. "No doubt all this is over me," she said, half teasing.

"I've got a job," he burst out between breaths.

Her dark eyebrows shot up. She squeezed his arm with both hands and said, "I'm glad, Tommy. Awfully glad."

"So am I. Well, got to go. Listen, if you're going up to see your father, you'd better not; he's snowed under. But stick around. I'll be back in an hour."

"You will? What for, Tommy?"

"I work for him. Goodbye."

"Wait, Tommy." There was a teasing light in her brown eyes. "Aren't you even going to hold my hand?"

"Haven't got time," he said importantly. "See you later. Goodbye."

"Goodbye, Tommy." Her throaty voice lingered after him. It was a very interesting voice, especially in the way she said "Tommy"—but he had a job. He turned and waved to her after he transferred to the high-speed lane.

He reached the street. It seemed to him there were no more people on the street than usual, but he noted that they were standing instead of moving. The sidewalk around the outside of the API Tower was filled. He made his way to a taxi.

Twenty minutes later he found Art Volson, dressed in old clothes and wearing a false beard so as not to attract attention to his youthfulness. Art was on his knees pulling weeds from among the dahlias. He got to his feet, brushing his knees, and said, with an obvious attempt at grumbling, "It isn't too bad a job, if it were not for the caterpillars."

Tommy grabbed him. "Get cleaned up. Ten minutes. You've got a job!"

Volson looked at him with his mouth open. Art was slimmer than Distal and very dark. He started to speak; then

he turned and bolted for the house.

Ten minutes later, they got into the taxi. Distal was still telling him about the job. They went to the API Tower and squeezed through the growing crowd on the sidewalk. Inside, Tommy remembered he was to stop by the chief technician's office. He took Volson with him. "You might not get in upstairs, by yourself," he said.

They passed half a dozen laboratories, where men and women were running feverishly in and out. They found the chief's office. It was in an uproar, but Tommy decided they were getting things done. He knew that would encourage Doctor Reynolds.

He led Volson outside, and Art said wonderingly, "Some job! What are *we* supposed to be doing?"

"This is only a sample. Come on, let's get upstairs; we'll go back this other way. It's shorter."

He led Volson down a wide corridor. He was about to go out into the rotunda that housed the escalator when Art stopped him. "Hey, there's a lab where nothing's going on."

Tommy whirled and looked at the partly-open door. It was true. There was no sound from within, no rush of hurrying feet; in fact, there didn't seem to be any movement at all. Distal frowned. He stepped to the door. Gingerly, in spite of himself, he pushed it fully open.

AT FIRST, he thought there was no one inside. Then a young man's voice, seeming to come from a height, said, "Come in."

Tommy looked around the great room with its chemistry bench and its cases filled with equipment. Then Art Volson punched him gently and he looked up. Standing on top of one of the high cabinets was a slight young man in brown slacks and a green sport shirt; he was holding a drafting-board, with the top edge propped against the

glass bricks around the window casing. He was watching through the window and sketching rapidly with a heavy black pencil.

"Make yourselves at home," he said without looking at them. "I'll be down in a minute. Can't stop now. It's a good scene down there—three men arguing with a taxi-driver. Quite a crowd. Human emotions in the raw. I love these street scenes anyway. Don't you?"

"Who the devil, are you?"

The young man answered without turning his head. "I'm Richard Somerset." His arm made quick, sure strokes. "Who are you?"

Tommy stared. "Are you sketching up there?"

"Yes, of course. There. That's enough. I'll come down now."

He stepped down onto a bench and then to the floor. "See what I got," he said. "See the movement—the drama in it. Men arguing under a big argon sign that says, 'Dance All Night?'"

"Yeah," said Distal, "but how about the lab?"

"What lab?" Richard asked blankly.

"Aren't you supposed to be experimenting on something to do with interplanetary flight?"

"Oh." Young Somerset's assurance left him suddenly. "If you came to find out," he said nervously, "don't tell my father, please. I'll get started on something right away." Richard was smaller than Distal and quite slender. He had brown hair and very white skin. Tommy glanced at his fingers. "You haven't done much technical work."

"No. My father kept me going to school, but I went just to please him and so he wouldn't forbid my painting."

Volson said, "You mean you'd rather paint than work?"

"Much rather." Richard Somerset sounded a little pathetic when he added,

"But father wants me to be a scientist, so I guess I'll have to do that to please him."

"Your father, is a very ambitious man."

Richard's eyes went to the sketch. "It's lots more fun to draw," he said sadly.

Distal finally got his wits together. "Well," he said slowly, "you might as well go ahead and draw. It's too late now for one laboratory to make any difference anyway."

They left. Tommy looked at the number over the door. It was 112. Volson said, "Do you think he's got all his buttons?"

"Sure, he's just a good kid who's trying to please his father, regardless of his own desires. I feel sorry for him. Goodness knows how Somerset ever got to be the father of a decent boy like that."

They went up to two hundred. There was a guard at the top, and they had to await identification from Dr. Reynolds. "Sorry," the man said as he let them into the side door. "FBI, you know. We're anticipating a wave of violence. Three fellows were just up here with pistols. I had to turn them in."

Tommy Distal was somber when he got to his desk. Dr. Reynolds was eating from a tray. Distal started to show Volson his duties when an emergency call came from one of the private screens. A picture flashed on the plate. They could see one of the strange craft, outlined by the glow of radiation. It obviously was at some distance from the lens.

A TENSE voice came on: "This is Major Galloway of the Fifty-fourth Reconnaissance unit, assigned to observe the area of the brown cloud in Vermont. We have now in our telescopic infra camera one of the strange craft that appears to be out of control, as it has left the air-lanes used by other craft. It has drifted near the

edge of the cloud but is still above the cloud. One of our gyro observation squads reports that the cloud is expanding toward the disabled craft, apparently to receive it. We shall follow its progress as far as possible. At the moment its general direction appears to be toward us."

Tommy leaned toward Dr. Reynolds. "If they could capture it," he said sharply, "we might at least learn what the invaders are like."

Reynolds nodded.

The voice again: "There seems to be a possibility that the craft will fall in unoccupied territory. It is now over Breadtray Ridge and about a mile beyond the present perimeter of the cloud. It is falling fast. Helicopter units are approaching with special squads to attack it as soon as it comes to earth."

Dr. Reynolds was gripping the arms of his big chair.

The craft was huge. It showed no lights—only the ghostly glow from its hull. It passed overhead. A new voice said, "This is Lieutenant Rumford of the Fifty-fourth Reconnaissance unit. The strange craft has passed beyond reach of Major Galloway, who has been ordered out of the area to avoid the advancing cloud. This party is covering the ship's flight in a dirigible observation unit flown up today by the Coast Guard. The craft is about half a mile ahead of the advancing cloud and it is doubtful now that any sort of unit can more than reach the spot where it will crash, before they will be forced to retreat by the cloud."

Reynolds groaned audibly.

"We are flying low," said the voice; "to better observe the craft against the sky. The poles you see now in silhouette under the strange ship are transmission-towers for a small power-line that supplies electricity for a forest lookout tower. The ship appears headed for the power-line."

Distal held his breath. The huge

craft went into a steep dive, straight toward the poles. "That's a 1,200-volt line. At least, that's the type of pole Atompowerinc uses for that voltage."

The craft spun for half a turn, then straightened. It dropped straight down, as if completely out of control. Tommy sat forward in his chair. "It's going to crash. I hope—"

It plunged toward the poles. It was only a short distance away—it was hard to say whether inches or feet—and dropping fast, when a yellow spark shot from one pole and buried itself in the space-ship. There was a flash that blinded them for a moment, even though the screen, and then the screen was dark.

They sat tense. Presently the opposing screen lit up and a voice came on. "Lieutenant Rumford's observation post is believed to have been destroyed by the explosion of the strange space-craft. The first helicopter unit to arrive at the scene of the blast has found no trace of the ship, which apparently was totally destroyed and perhaps gasified. A spectrograph was taken to Washington for analysis. The brown cloud is rapidly approaching and will drive back parties searching for wreckage within a few minutes. It is believed here at this forward command post that there is no doubt the invaders are preparing a base on Earth for operations of some antagonistic nature. This is a limited broadcast on a code wave-length to subscribers approved by the Department of Defense."

THE SCREEN went blank. Tommy let out his breath. Dr. Reynolds was rubbing his hands slowly and shaking his leonine white head.

Tommy went to his own desk. "Now," he said to Volson, "write some short statements on each one of these subjects. You can do that easy enough. Remember how we used to handle the university annual? Same deal here. We don't know anything, but

the people expect assurance anyway."

Art nodded. "Okay, I'm with you. It's a lot better than caterpillars but it's still hard to believe it's a real job."

"It is," Tommy assured him, "and—" He broke off. Somerset was coming in the side door. He glared at Distal for an instant, and then went on to Reynolds. "Anything I should know, Doctor?"

"Nothing in particular, I guess."

"Need any help?"

"Thanks. I have plenty."

"The Army asked about power for the underground factories at Rifle, and I was happy—"

"I heard that," said Reynolds.

Somerset hesitated. Then he went on. "I may report that my son Richard has started a program on a weapon that may require enormous power—power that we would not have dreamed of ten years ago."

"Fine," said Reynolds, and shuffled some papers on his desk. Somerset left.

Reynolds turned to Tommy. "The Brookhaven people will be here in twenty minutes, and before they come I want to discuss the situation with you. Strangely enough, when I talk it over with you, I get the feeling I am on solid ground. Is that from the confidence of youth, do you suppose?"

"Maybe," said Distal, looking after Somerset, "it's contrast."

Reynolds smiled noncommittally. "By the way, you came through the laboratory section?"

"Yes, sir. I would say everything is as good as can be expected. It takes time to make order out of disruption."

Reynolds nodded and leaned back against the magnetic field in his chair. "Sit down. I am not to be disturbed for fifteen minutes. I want to relax and just think about the problem for a few minutes. I used to be a fair man on theoretical electricity."

"I know. Grandfather had a high respect for you."

"What kind of weapon do you suppose Somerset Swinkhammer has in mind—that his son is working on?"

TOMMY SWALLOWED abruptly. "I—some sort of electrical projection, maybe." He was thankful for that inspiration. "You saw what happened to that ship a moment ago. It was vaporized. Obviously they are vulnerable to an electric spark—but how could you project it? As long as they stay in the brown cloud we can't touch them. What we really need to do is attack them at their base—on the Moon—but there we're back in the circle again. We can't get to the Moon."

"Do you have any theory, as to why the ships should be susceptible to electricity?"

"It's obvious they have a very low potential—possibly even much lower than the Earth's, which is zero. The video this morning said examination of plates taken at Palomar indicate they have come here from the direction of Rastaben in the constellation Draco. If they do come from outside of the Solar System, then I don't think it's possible to even predict what sort of entities they might be.

"They might be anything. They and their ships and all their elements and materials might be in a different sort of electronic equilibrium from our own, so that they are, you might say, abnormally thirsty for electricity but completely unable to endure the least touch of it. But I admit I have no idea for using their susceptibility. It is obvious that the Earth's zero potential is low enough so that they get no sparks from the Earth when they settle down on it; otherwise their ships could not return to the Moon from the base in Vermont."

He looked up. "If we could literally fill the Earth so full of electricity it would jump from Earth to them—"

Reynolds shook his head heavily.

"No," he said. "We wouldn't dare ground the Conduit into the Earth, if that's what you're thinking. To tell you the truth, Tommy, we investigated that some time ago when we first suspected the Conduit was about to become self-perpetuating. Our engineers do not believe it can be done without enormous destruction."

"Well, the situation is that we have the ammunition but no way to throw it."

"I'm afraid that's the story. Well—" Reynolds picked up a metallic sheet. "Here's what I wanted you to do this afternoon. The foreman at the sub-station on the Conduit south of town asks me to send him an engineer. Suppose you run out there, just to reassure him and check up. We don't want anything to happen to the Conduit at a time like this."

"Yes, sir; glad to."

"If you want to avoid the crowds, you can take my private elevator. It opens on an underground tunnel that was made for emergencies. The tunnel comes out a couple of blocks away in a private office in the Floating Gardens night club. The office is supposed to be the entrance to an illegal gambling room, so it isn't disturbed. You can come in that way too."

"Thanks. Maybe later on I'll use it." He couldn't explain that the feeling of going through a crowd and knowing that he had a job, that he was on business, was almost intoxicating.

So he took the escalator. He was down to the lobby floor when he saw Sharon. He gasped and hurried to her. "I'm sorry," he said. "We went in the other way. It was part of my job, you know."

She smiled. "Since it's your first job, I'll forgive you for making me wait an hour."

"Come along," he said. "This is another one of my duties. You can go with me."

4

IT WAS AFTER two o'clock, and now people were standing out in the street. They were congregated most thickly before the entrance to the tower, and Tommy Distal began to push through, leading Sharon. Then he heard the first muttering of the crowd, and caught jeers: "Lookit the big-shots!" "Smart alecks from API!"

He glanced back. The way was closed. Sharon's face was white. He took her hand and kept going through the crowd. He was nearly out when a stringy-haired woman threw an open jar of pickles at him. He stopped the jar with his hand, but the pickle-juice drenched him down the front. He pulled Sharon up close beside him and faced them angrily.

The solid front of the crowd was suddenly quiet, waiting, and for the first time he was afraid. He turned and went to the right, pulling Sharon close behind.

They let him go. It was, he thought, too early for real violence; but after dark it might be different.

A block from the API Tower, he found a taxi and told the driver where to go. It was twelve miles out. The driver went ten and stopped. "Okay, buddy." He opened the door.

Tommy said, puzzled, "It's a couple of miles yet."

"See that marker, Mister?" The driver pointed to a box with a ragged white-painted legend: *Danger*. He said, "If I go past that sign, my engine will freeze up; I'd never get my car out of there."

Tommy got out slowly. "What are you talking about?"

"It's something about the Conduit. No machinery won't work close to it."

Tommy said worriedly to Sharon, "You better go back. Something's wrong out here."

"You said it, Mister," agreed the taxi-driver.

But Sharon said calmly, "I'll go with you, Tommy. I'm interested in this, too."

The driver said, "There ain't no danger to *people*, ma'am; just to engines."

Tommy paid him, and they started on foot. The Conduit lay before them, a great silver-colored rope supported far above the ground. The eight-foot pipe itself was surrounded by a four-foot space of nitrogen at fifteen atmospheres, with an outer casing of four-foot hard rubber and sulphur hexafluoride. The big, silver-painted outer shell was supported on titanium-steel towers eight hundred feet high.

They reached the little house at the foot of one of the towers. A man met them with a cocked rifle. "Where you from?" he demanded.

"Dr. Reynolds sent us."

The gun was lowered. "Okay. Come inside."

They went into the tiny building. They could look out in every direction, for the four sides were of glass. "Now what's this all about?" Distal asked.

"I'm Wickware. I sent a message to Somerset three days ago, asking him to come out here." Wickware's voice was complaining. "Now it's too late. There isn't much I can do except try to keep people away, so they can't tear down the supporting tower. But this gun's no good here; it won't fire. Look." He pointed the rifle at the window and pulled the trigger. There was only a leaden-like click of the hammer. The man ejected a .30 caliber high-velocity cartridge.

"Why doesn't it fire?" asked Tommy.

"Nothin' works close to the Conduit. Nothin' that goes fast, that is. Step out there and try to throw a rock."

TOMMY DID. The arm that swung the rock seemed to be pushing

hundreds of pounds. He dropped the rock, and stared as it floated to earth. "What under the sun is going on?"

"Nothin' that moves fast can move in here," Wickware repeated. "That's why the taxi didn't come in. And you know something else?" He nodded at the Conduit. "The thing reaches farther every day."

Tommy stared at him. "You mean the *zone* gets bigger every day?"

"That's right. It reaches farther every day."

"How much farther?"

Wickware pointed. "See that stick? That's how far it was when I first noticed it."

"When was that?"

"Ten days ago. I sent in a report to Somerset, but nothing came of it. So I marked it every day. You can tell."

Tommy Distal drew a deep breath. "I see." He said to Sharon, "Take my watch. I'm going to hold a rock as high as I can, and you time its fall. We'll do it about ten times and take an average."

She nodded. Her eyes watched his. He dropped a rock and watched it float to the ground. After the tenth time he shook his head and put his watch back on his wrist.

"What does it mean, Tommy?" Sharon asked fearfully.

"I don't know yet, but it's not encouraging."

He thanked Wickware and they started to the free zone. The effect took hold when they tried to go into a fast walk; then it was difficult to move.

He found a farmhouse beyond the danger sign and called for a taxi. Then he looked at Sharon and said, "Are you ill?"

She shook her head. Suddenly Tommy remembered. "You haven't had anything to eat."

She smiled. "And no breakfast."

He shook his head slowly. "I was so

busy on my new job that I forgot all about eating."

He talked the farm-woman into giving them some lunch. "Is this what people in town are muttering about?" he asked her.

"I guess so," the woman said. "My man took his tractor into the corn down over the hill and it froze up. I guess people are worried. There's considerable feeling around here, anyway. It's a good thing guns won't shoot and cars won't run close to the Conduit."

Tommy was astonished. Somerset had known about this for ten days but somehow had managed to keep it out of the news—perhaps with promises to reporters of an early news break. And now this trouble was covered by the invasion. Perhaps it had been kept under cover by security censorship all along, at Somerset's suggestion. Somerset had not reported to Dr. Reynolds.

The taxi came. Tommy and Sharon rode miles along the edge of the "danger" zone. Everywhere Tommy asked questions. A horse and wagon could travel in the zone at a slow walk, but trying to move fast was like swimming in mercury.

LATE THAT night, Tommy took Sharon home. "It's a pretty serious job, Tommy," she said. "I hope everything goes all right."

"It will," he said confidently. "I'll make it."

But he did not feel confident of anything when he reported to Dr. Reynolds at the API Tower, after going in through the tunnel entrance to avoid the mob pressing against the Tower's great bronze doors.

"I'm sorry to have been gone so long, sir, but this turned out to be serious, and I thought you would want as complete a report as possible."

"Yes," said Reynolds. "Everything here is as good as it can be. Art is doing a good job." He motioned toward Volson, who was talked on two

visiphones at once. Then Reynolds sniffed. "What is that odd smell? It's almost like—pickles."

Distal raised his eyebrows. "It is pickles. I haven't had time to change my shirt."

"You shouldn't be so careless with your eating. Now what's this trouble with the Conduit?"

"Briefly," said Tommy, "the Conduit is creating a zone of friction—I suppose through some unknown effect of electricity at the high voltage in the Conduit. I have estimated that it causes friction to increase as the fifth power of the speed. And I regret to say, sir, that the zone apparently is extending itself rapidly. It started at Wickware's station ten days ago and began to spread in a circular area. Three days ago, it started following the pipe, and now extends over a hundred miles in both directions."

Reynolds looked almost unbelieving. "Why haven't I been advised of this?"

"I don't know, sir."

Dr. Reynolds passed a white hand over his forehead. "That would mean that no motor within the Conduit's friction zone would run—that nothing fast-moving, driven by electricity, could operate." He sank back and looked hopefully at Distal. "Do you have any suggestion for turning off the Conduit—any wild idea that might work?"

"Not much. Although I did have one pipe-dream."

"Let's hear it. Anything is worth considering."

"I wondered," said Tommy, "if maybe you could turn on the Distal tubes again and get them to oscillate in harmony with the current in the Conduit, and possibly take control of it that way." He shook his head. "It's pretty far-fetched, I guess."

Reynolds' blue eyes had brightened a little. "Anything is worth considering."

"What is the situation in Vermont, sir?"

"The invaders have extended their area to take in the entire White Mountain Forest." Reynods shook his head slowly. "We know nothing about them yet, but it doesn't look good. This country is in serious danger. Perhaps the whole world is threatened."

He seemed suddenly old and shrunken. "I think," he said, "I've lived beyond my time..."

DISTAL and Volson were in the office early the next morning, but Reynolds was ahead of them. He looked better, Tommy thought, but much too weary.

"At thirty-two hundred centichrons," Reynolds said, "the engineers are going to switch in the Distal tubes. He looked at the illuminated gold chronograph set in the glass over the video screens. "I called a conference by visiphone last night, and they agreed to give your idea a try." A light was glowing over the No. 4 screen. "I guess they're about ready. We may as well watch. It won't take very long to know the answer." He pointed to an electronic coffee-brewer. "Help yourselves."

"Thank you."

The private screen glowed into life. The great subterranean rock chamber out near Rifle, in glareless white enamel and soft chromium, came to sight. A bare half dozen men were visible. Art Volson asked, "How shall we know the results?"

REYNOLDS pointed to his desk. "There's a remote-control induction meter, graduated in billions of volts. You see where the indicator-needle is now, at the extreme right. As long as it is steady, the orange pilot-light will glow. If it starts to drop, the pilot-light will blink."

"And if the current does drop when the Distal tubes are cut off—?" asked Tommy.

"The engineers have been working all night to get things ready. If the current drops, they will allow it to cease flowing entirely. In the meantime they will make announcements over radio and video to prevent rioting. It will take them about six hours to change over the Distal banks to produce current of a type that will be safe to handle."

A voice was coming from the screen. "Mr. Endicott, special assistant to the chief engineer, is about to throw the switch that will start the motor to throw the master switches that will activate the Distal tubes," it said simply. "Please stand by."

"This is piped on a scrambled frequency," Reynolds said presently. "Only this office and the Office of Defense are getting it."

"Look!" Tommy whispered. "The Distal tubes!"

In the great chamber, a faint violet light began to sputter at the left. It swept across the room as endless banks of big tubes began to work. It reached the right, and by that time the left half of the chamber was glowing with a full, brilliant violet. That swept to the right as a green tinge started behind it. The green light became vivid and shot across the hundreds of thousands of tubes. Then suddenly the entire chamber flared into white, almost blinding incandescence. This lasted for an instant. Then the tubes settled down to a steady golden glow.

Tommy sat back, limp. He'd never seen the Distal tubes turned on before. He heard Art Volson swallow, and Reynolds' voice came vaguely: "That's it; they're synchronized now with the Conduit. We'll soon know."

The big room was silent for a moment. Then a voice came from the screen: "Mr. Endicott is starting to cut down the voltage. Watch your meters, please."

Tommy stared at the steadily glowing needle on Reynolds' desk. He

looked back at the screen. One section of the tubes had gone dark. He shot a glance at the meter. The light blinked!

He held his breath. The needle started down, blinking. On the screen, bank after bank was going dark. Distal watched, fascinated. Then he became aware of something that turned him cold. He looked back at the meter. The light was glowing steadily—strongly. His jaws tightened as he realized the needle had shot back up to two hundred billion volts.

Presently the screen was dark. The voice came again. "The attempt seems to have failed. Just a minute."

Tommy thought he sensed a touch of panic in the voice. He sat tense, waiting. Then suddenly he knew what it was. The voltage was building up! His throat was tight as he looked at Reynolds' meter. The needle had passed the two-hundred-billion mark and was moving. Moving upward.

A HURRIED announcement from the screen: "This concludes the cast. Further information on the operation will be released as available."

But Tommy Distal did not need to be told what was happening out in the chief engineer's office. The impetus of the charge from the Distal tubes had given the Conduit a surge of power that was now building up its voltage instead of reducing it.

He looked at the needle again. It was still crawling upward. For an instant he closed his eyes. Then he looked at Reynolds. He felt sorry for the older man. Reynolds had taken his suggestion and it had backfired. "I'm sorry, sir."

"It isn't your fault," Reynolds said. He sounded helpless. Then he shook his head. "The trouble here is, we don't know anything about this order of power. It isn't just a bigger voltage of electricity; it's a *different* voltage." He swung around to a typed sheet on his desk. His next words were

matter-of-fact. "The bromine cloud in Vermont," he said, "has been moving south during the night. The village of Lake Hamilton has been uncovered and is now being decontaminated by the Army. I want you both to go up there as my personal representatives and see whatever you can see. We need to find out what the invaders are like, what they want, how they can be dealt with. I have arranged for transportation and passes. You may leave at any time. But there is just one thing; don't take Sharon. She has been pestering me to go with you, but this may be dangerous."

Tommy's face felt a little red, but he asked, "What about our jobs here?"

"I am at the point," said the older man, "where I feel justified in saying 'No comment' to all questions. I don't like to be that way, but what else can I do? The plain fact is that we don't know any more than anybody else."

Distal nodded. "We'll leave right away."

5

TWO HOURS later, a helicopter set them down near Haystack Mountain. A guard glanced perfunctorily at their pass. "Thomas Distal and party," he said. "Okay. You're on your own risk. The purifying squads have gone through, and Lake Hamilton is safe as far as we know—but we don't know too much. There may be a little bromine in the corners yet. It was just cleared a little while ago and we're waiting for the coroner. But the cloud left before sun-up and I imagine the invaders all went with it. Just be careful not to touch anything until the experts get a chance to look around." The guard glanced skyward. A helicopter with a missing cylinder was dropping in for a landing. "Do you have weapons?"

"No."

"Here's a pistol—just in case. Leave it here when you get back. You probably won't need it, but I don't want to be accused of letting somebody go into the area unarmed."

"All right." The two walked half a mile up the wagon-road to the small group of houses clustered around a tall-spired church on the mountain-side. There was no movement in the narrow streets. Art Volson said in a voice that sounded as if he spoke with difficulty: "This all must have been a millionaire's estate. See the stone mansion beyond the church? It's ten times as big as the others."

Tommy was squinting. "I thought I saw movement in one of those big front windows."

Volson looked and said, "Nothing there now. Maybe it was the sunlight reflecting from the glass."

"Maybe. Do you see anything strange?"

Volson looked around. Then his voice was awe-struck as he said, "Sure. For a minute I was kind of lost. It looked as if everything was covered with snow—but this is summer. I know what it is now; the blades of grass, the leaves on the bushes and on the trees, have lost their color. Everything that should be green is snow-white!"

TOMMY NODDED soberly. "What could have caused that, do you suppose?"

"You don't suppose it's on account of the bromine?"

"I don't think so. Bromine wouldn't extract every particle of chlorophyll and leave everything white." He stared at Volson. "Is that it? Do the invaders want chlorophyll?"

He looked down the valley. In the far distance, the ominous brown cloud hovered over the earth, covering the sky, but between Tommy and the cloud, the mountainside was covered with vegetation that had been turned snow-white.

"It's conceivable that this sort of thing could go on all over the Earth; and if so, millions of people would starve—maybe the entire population of Earth, for the chlorophyll molecule, by turning sun-radiation energy into chemical energy, is the one molecule that makes life possible on Earth."

Art said thoughtfully, "That would make it tough on caterpillars, wouldn't it?" Then he sobered. "Do you suppose any human being lived through that bromine cloud?"

"I doubt it. It was here for twenty-four hours, and by the looks of the woodwork around the church door there it was pretty strong."

"There's no varnish or paint left. It looks as if it had been sand-blasted."

"The bromine would go into water solution with moisture in the air and form a certain amount of hydrobromic acid—and goodness knows what else there was," said Distal. "Let's have a look in the church. There should be some people in there."

They pulled open the outer door and went in. Tommy said in a hushed voice, "Most of them got it here."

There was still the irritating smell of bromine, and when he looked up toward the distant ceiling there was a tinge of brown in the air. The pews of the small building were half filled with men and women and children. Some were lying on the seats; some had flung themselves across the backs; one was in the center aisle, his face contorted. And at the communion rail, facing them all, was the pastor. He was kneeling, one hand on the rail, the other at his throat.

"It was slow," Tommy said in a low voice, "but it was inexorable. The stuff seeped into the building and gradually diluted the air until they suffocated."

"What would this be like in Cleveland?"

Distal shook his head. "I don't suppose anybody in the cloud area could

have lived through it—but I had hoped we might find a ship or even one of the invaders, so we could see what they are like. We don't know whether they are animal, vegetable, mineral—or what."

THEY WENT outside. They put their hats on again.

"Apparently," said Volson, "their radiation doesn't produce secondary emanations."

"Apparently not. It seems to be a device for protection while they are extracting chlorophyll by some sort of vacuum process that doesn't even require them to remove the leaves."

"A very quick vacuum might do it—say one that lasted for a thousandth of a second—and they may have some sort of machinery to produce that." Distal pulled his hat tight on his head. "Well, this is all speculation. We need more facts. I say we go down the valley toward where the cloud is—"

He broke off. He wheeled and stared toward the big stone mansion. A muffled scream was coming from it—a high, sharp cry of terror.

Volson said, "Somebody's alive!"

"I did see movement!" Distal ran toward the big house. The scream came again as they were bursting through the front door. They pounded upstairs. There was still the smell of bromine in there. Tommy spun around the head of the stair and went through the first open door. Then he stopped and his feet slid on the bare floor. "Sharon!"

Sharon was backed into a corner. Her blonde hair showed against the old, dark-stained woodwork, but her eyes were filled with fright. She gasped, "Tommy! Thank goodness!"

Distal started toward her, but Art, behind him, said in a queer, hushed voice, "Watch it, Tommy!"

Tommy turned. They were in one end of a long library. Their end held a desk and a chair. In the center was only a rug on the floor, with long win-

dows along one side. At the other end the walls were filled with books, and on the bare floor, beyond the rug, was a creature. It looked very much like a Gila monster, but it was huge. It would have measured twelve feet from the spade-shaped snout to the end of its blunt, overheavy tail. It was covered with scales that were a glossy blood-red, except for a wide black stripe around its middle. It had very short and heavy legs that barely held it off of the floor, and its huge head weaved from side to side just above the floor while luminous red eyes seemed fixed on them.

"That thing!" Sharon gasped. "It's one of them! It got left behind!"

Art Volson drew back into the corner with them. "It's gasping."

"I don't suppose its metabolic system can handle oxygen," said Distal. A chill shot up his spine. "It's heading for the door."

"It's going to trap us," said Sharon, huddling against Tommy.

It was moving clumsily along the wall, in the alley of bare floor toward the door. Tommy shouted, "Run for the door! We can beat it!"

But the creature moved fast. Tommy snatched out his pistol and fired. The bullet hit the alien's scales, whined a short ricochet, and buried itself in the wall. Art and Sharon got through the door, but the creature's short legs moved astonishingly fast. Its huge tail, dragging on the bare floor, made a scraping sound.

TOMMY THREW his pistol at it and ran, but he saw he couldn't make it. He stopped at the last moment, but his feet slid on the rug. In an instant of horror he saw he was sliding straight into the creature. He put out one hand in a futile gesture to keep from crashing against it.

Then an unexpected thing happened. He was about to touch the alien's back, just behind the shoulders, and it

surged to get away. A tiny spark of static made the familiar pop and jumped from the end of Tommy's fingers to the creature's back.

There was a great flash of yellow light, a sudden insweep of air, as if into a vacuum, then a deafening explosion that threw him back across the room.

He was half-conscious when Art Volson and Sharon picked him up. "Are you all right, Tommy?" Sharon whispered.

Tommy moved his arms and legs. "I'm not hurt," he said. "What happened to the alien?"

"It vaporized."

Tommy got up gingerly. "They can't stand electricity of any sort. It knew that we would build up a static charge by walking across the rug, and was trying to get away."

"Trouble?" asked a new voice.

They looked toward the door. An army officer came in. "I heard a scream. I'm Lieutenant Meyers, Army Intelligence."

"We had one of the things cornered," said Tommy slowly, "but we didn't know it. They're susceptible to electricity in very small amounts. The thing blew up when I touched it."

Sharon shuddered. The lieutenant looked unhappy. He said, "What are you doing in here anyway? Did you live through the bromine cloud?"

"Special pass from the secretary of defense. We're from the office of Dr. Reynolds, chairman of the board of Atompowerinc."

"Let's see your pass."

Tommy showed him. The lieutenant said, "Are you Thomas Distal?"

"Yes, sir."

"These two in your party?"

Tommy glanced at Sharon. "Yes."

The lieutenant gave him back the pass, but he wasn't happy. "People like you, make my work ten times harder. You've destroyed what may be

the only available evidence as to the nature of the invaders."

"I'll tell everything I know," said Tommy.

The lieutenant nodded. "Thanks," he said sourly. "I suggest you leave the area now. The army is moving in, and we don't want any more complications."

"Okay." Tommy didn't blame the officer for being disgruntled.

They went back to their planes. Sharon decided to leave here. "It isn't running right. Anyway," she suggested slyly, "maybe you'll hold my hand on the way home."

Distal looked at her contemplatively. Then he said, "Nix. You've been a bad girl. Your father told you to stay away from this area."

She looked overly chastened.

"**WE** DON'T know much about the invaders," Tommy said as soon as they were in the air, "except what they look like. They aren't susceptible to metal bullets. They need chlorophyll. They can endure hard radiation. They breathe bromine."

"Must be a strange metabolism," said Volson thoughtfully.

"Very—and what a breath on the morning after." He chuckled and looked for Sharon's approval, but when he saw how pale she was from the reaction, he sobered. "Apparently they come from a world where radiation is intense, but something has happened in recent times to destroy the chlorophyll in their vegetation. Maybe it just died out—lost its vitality. Who can tell?"

"At any rate," said Art, "they're after more. Whether they want just a starter to act as seed, or whether they intend to take back enough to replace their own, we don't know."

"From the way they're moving," Tommy said seriously, "it looks as if they'll take all they can get."...

By forty-four hundred, Distal and Volson, avoiding the streets packed

with people, went in through the underground entrance and up to Reynolds' office. They told him what they had found, and Reynolds shook his white head. "The cloud has moved fast this morning. It has crossed the White Mountains area, and everywhere the story is the same—all vegetation left snow-white. The Army is evacuating the area in its path, but every living thing in the original area is dead—animals, birds, fishes, insects." He sighed, and it was almost painful. He pushed at half a dozen small sheets of typewritten paper on his big desk. "You haven't heard the worst. The public has not been told, for the government fears widespread rioting. There have been reports of additional landings, some in Canada, some in the western states. At least two have been verified."

Distal was silent for a moment. "If we could only find a way to project an electric spark for a distance, we could whip them in a hurry."

Reynolds shook his head. "Every expert in the country has been working on that, but only one claims to have anything promising. A Colonel Moorhead from the Navy experimental station at Inyokern believes he has an idea that will do the business. He's coming here to ask our help. In fact"—he glanced at the chronograph—"he's due here any minute. I sent an armed escort to meet him at the jetport. You boys wait. I have some jobs for you."

"Yes, sir."

A magenta light glowed. The girl's voice said: "Colonel Moorhead to see you, sir. He has a code-word: 'Spark'."

"Send him in, and ask Mr. Somerset to step into my office, please."

Colonel Moorhead was a rather young man of the older generation—about ninety, Tommy thought—and quite solid-looking. "I have some equations and some drawings," he said. "I believe there is a possibility that with the proper equipment we can project

sparks in a controlled direction and to a certain extent for a distance."

"Your idea has been approved by the director at Inyokern, I understand."

"He believes it is worth a trial."

"All right. Excuse me." Somerset strode in, his usual gaunt face deeply lined, Tommy thought. Reynolds said, "Mr. Somerset, Colonel Moorhead. And—oh, yes—Tommy Distal, grandson of A. P. Distal, and Art Volson—my assistants during the emergency, Colonel."

THE COLONEL smiled briefly, then opened his briefcase. "We won't need a great deal of equipment, though your laboratories in the electrical line are much better furnished than ours. The main thing is: this project, if successful, will require considerable power."

"What do you mean—what order of power?" asked Reynolds.

"My guess is to start off with half a million volts. It might range up or down from there, but—"

Reynolds was shaking his head sadly. "I'm very sorry." He looked straight at the colonel. "We have two hundred billion volts in the Conduit but we can't use it. It is free-flowing; the generating plant has been turned off for over a week, but the current keeps flowing. As a matter of fact, our engineers estimate the voltage is increasing of its own accord. It is now up to two hundred and eight billion volts."

The colonel smiled. "That's fine; that's just—"

"No," said Reynolds, "the sad part is that that free-flowing electricity is creating a friction field along the Conduit. It seems to be a great deal like a force-field—perhaps some entirely new phenomenon of electricity. At any rate, everything mechanical within that zone freezes up when fast motion is involved. No motor, no moving electrical appliance will operate on our

current, because the friction field is following the feeder lines!"

Tommy flinched; the colonel looked aghast. "You mean—Atompowerinc's electricity is no good?"

"That's what it works out to," Reynolds said quietly.

The colonel drew himself up. "Washington will hear about this."

"Washington knows, Colonel."

The officer glared at Reynolds, then at Somerset. "Aren't you," he asked Somerset, "the man who designed the Distal banks? Didn't you know how much electricity you were going to produce?"

"Yes," Somerset admitted.

"Then why did you produce so much more than the country needed?"

Somerset shrugged. "So we'd have plenty of power."

The colonel nodded savagely. "Now you've got plenty of power. Now we need plenty of power—but we can't use it. You've got two hundred billion volts flowing in that pipe but it isn't worth a damn because it won't do any work." The colonel looked angry, and Somerset took a step backward. "Why did you ever turn the Conduit on? Anybody with any sense wouldn't have created such a force. I've always wondered why you did that. I supposed you knew what you were doing—but now it turns out that you were a blundering idiot. You created it because it was cheap—and I suppose you figured to make a lot of money out of it."

Somerset said uneasily, his black eyes watching the colonel, "Why blame me? A. P. Distal—"

The colonel advanced. "I knew Atom Power Distal almost as well as you did; I went to work for him after you left. He had nothing to do with it. He died before the plant was designed."

"He knew," said Somerset, "that the current might become self-perpetuating. Why didn't he speak up?" Somerset became more confident. "Who was

I to challenge A. P. Distal's judgement?"

The colonel said, "A. P. Distal never hinted at that possibility. I have read his complete notes from cover to cover." He took one step and glared in Somerset's face.

Somerset was white. He shouted, "He had it in his private diary. Why didn't he make it public? How was I to know what to do? If A. P. Distal knew it and kept it a secret, who was I to make it public?"

Tommy was on his feet. He pushed his way between Somerset and the colonel and his eyes bored into Somerset's. "Say that again," he said. "Louder but not funnier."

Somerset looked flabbergasted. "What do you mean?" he asked beligerently.

"I'm asking the hundred-million-dollar question," Tommy said in a deadly voice. "How do you know what was in my grandfather's diary?"...

6

AN HOUR later, Dr. Reynolds prepared to go out. "It's driving me schizzy," he said, and smiled. "I've got to get a breath of fresh air."

"Be careful of the crowds," said Distal; "they're ugly."

"Nobody will recognize me; there's nothing to worry about. My FBI shadow follows me everywhere anyway."

Tommy felt pretty good. He had secured signed statements from Reynolds and the colonel as to what Somerset had said about his grandfather's diary. "The way things are going, these statements may never be worth anything in money, but at least my grandfather will be cleared of charges of stealing Somerset's idea." He snorted. "The only idea Somerset ever had was how to get something for nothing."

He answered the telephone. "Dr.

Reynolds is not available at this moment. I will have him call you." He sat back in his chair. "One thing is obvious," he said to Volson. "Without power, we can't produce weapons. Very soon we won't even be able to drive cars or planes because the fuel will give out. Food supplies will get short. Everything that depends on electrical power will be affected—and that is most *everything*."

"Then," said Art, his dark eyes thoughtful, "really the first problem is Conduit."

"Yes. We can't stop the juice from flowing. We can't use it. The only thing possible is to ground it out—but we don't dare ground it out on the Earth."

"Well," Volson said with an attempt at lightness, "why not ground it out on the Moon?"

Distal stared at him, and his eyes began to widen. Then he jumped up. "That's it!"

"What?"

"Ground it out on the Moon! In air, it takes forty thousand volts to jump a gap of one centimeter. At that rate it would take only forty-five billion volts to make a spark all the way to the Moon."

Volson's dark eyes bulged.

Tommy went on fast: "The thing is to weaken the insulation some place on the top of the Conduit and persuade the electricity to short circuit from there to the Moon."

"—Without going to the Earth first."

Distal nodded. He jumped to his feet. "I'll be back in a minute."

HE TOOK the escalator down. He found Laboratory 112. Richard Somerset was sitting in a corner now, painting on canvas from his sketches. "It's pretty terrible out there," he said soberly, "with all the violence and trouble. People have forgotten how to be human beings." His slender, sensitive fingers put a spot of red on a

man's open chest. "He got shot this morning by the guards while he was trying to break in here," he added, in a hushed voice.

Tommy Distal looked at the far-way light in Richard's eyes. The boy certainly was not a person to face the world in its present condition. Tommy went into the laboratory's supply cabinet. He found a section of neocrosolon, the fluoride-base insulation on the Conduit. He put in a rush call for half a liter of liquid helium via pneumatic delivery. When it came, he poured it over the neocrosolon and then tapped the insulation material with a pencil. It shattered, and Tommy shouted. He ran out and jumped directly on the high-speed lane of the escalator, wondering incidentally how long it would be before the friction effect would stop the motors that operated it.

He dashed into Reynolds' office by the private entrance. "I've got it all doped out!" he shouted at Volson. "Where's the boss?"

But he stopped at the grave look in Art's eyes. Doctor Reynolds was captured by a mob about twenty-five centichrons ago," he said. "They are holding him in hiding, and they sent word that they won't release him until the Conduit is shut off."

Tommy groaned. "Where's Somerset? Did you notify him?"

"I couldn't locate him; he disappeared after he left here."

Tommy paced the floor. He walked over to the great glass wall and looked through the billions of tiny lenses, far across the lake into Canada. He went to the end walls and looked down half a mile at the ground. Finally he said, "What are you doing about Reynolds?"

"The FBI is hunting him, but without much hope of success. They advised us to stay here and do what we can to keep order. They say that's about all anybody can do now."

Tommy turned decisively. "That

isn't all anybody can do. I can ground out the Conduit—I think." He picked up the telephone. "Get me the Secretary of Defense. Scrambled circuit, please."

A moment later a voice said, "Secretary William's office. Who's calling?"

Distal took a deep breath. He was depending now on the distortion effect of the scrambled circuit. "Doctor Reynolds of API."

A moment's pause. "Switch over to visiphone, please."

"Our visiphone circuit seems to be impaired," Distal said, jerking out the cord. "This is an urgent call. The code-word is 'Spark'."

A man's voice came on. "Williams speaking."

"Reynolds' office. We think we have an answer to the problem of the Conduit."

"Yes?"

"We have a man here named Tommy Distal, grandson of A. P. Distal."

THE SECRETARY'S voice became a little more cordial. "Yes. Go on." "He has an idea but it will require the help of the Army."

"If you recommend it, Doctor, he'll get it."

"I recommend it." He mentioned the number of rocket shells needed quickly, then went on, "Long-range rocket shells—I mean interplanetary—with explosive warheads filled with iron dust and ready to start firing at the Moon by supertime."

The secretary must have gulped. "If it is necessary," he said. "I presume they can be fired from different points."

"Yes. If you will put me in touch with the head of the Army Artillery, I will tell him exactly what we want. Now, where is the nearest horse-mounted unit to Cleveland?"

"There's a reserve squadron in Cleveland. It's not a regular Army unit, but—"

"Have they got horses?"

"Yes. The officers are sons of wealthy men and they keep horses for dress parade."

"Put them under my orders." Tommy caught himself. "Or, rather, Distal's orders. And you have some experimental lighter-than-air equipment at Akron?"

"Yes."

"We'll need two large dirigibles."

The secretary said, "You may as well have them, I guess. You'd better have Distal go up there and get just what he wants. If there is trouble he can call me."

"Thanks," said Tommy. "By the way, pay no attention to any reports about me. It may be necessary here in Cleveland to report extreme measures to secure freedom of movement, but the FBI is here and on the job."

"I understand, Doctor Reynolds. I will switch you to artillery now."

Tommy told the major in Rocket Artillery that he wanted a barrage of shells that would explode simultaneously along a straight path from the Earth to the Moon at exactly sixteen hundred centichrons past midnight—just before dawn.

He crossed his fingers and tried to look pious as he hung up the telephone. "That should take care of everything until morning," he said. He called the cavalry squadron headquarters, found they had a hundred and twenty horses, and told them to have the horses at Wickware's station on the Conduit at midnight.

Then he took Volson; they rode a jet-plane to Akron. The post commander there had just talked to Washington, and he didn't approve the informality, but he cooperated and assigned a hundred men to help.

Tommy had all the engines but one removed from each big dirigible. He had the bags emptied of helium and inflated with hydrogen. The ships were to carry minimum crews and no load

but a magnesium cable. The biggest ship, the *Luna*, was to go to fifteen thousand feet and carry the top end of the cable, which Tommy ordered prepared in Atompowerinc's shops on a "supercede-everything" order issued in Doctor Reynold's name. The cable was to be connected to a hundred-foot needle-like point of copper that was to go up through the center of the *Luna* between her gas-bags, and protrude from the top. The second ship, the *Mars*, would ride at a lower level and help carry the load.

Then Tommy contacted the Signal Corps unit and found that the meteorologists already had information on wind-drifts. It was raining now in the friction zone, slowly but steadily, and there was a slight wind-drift toward the Conduit from each side, with a slow updraft in the middle. That Distal told Art Volson, was perfect.

IT WAS suppertime when he sat down once more at his desk in Reynolds' office and ordered all of Atompowerinc's available supply of liquid helium—there were almost a thousand kilograms—transported to the Conduit pier near Wickwar's guard-post. He also asked for a hundred volunteers from the pole-working unit of API's Cleveland plant. They were to be at the pier at midnight. "The pay," he promised, "will be triple time."

"The moon will be overhead tonight," Tommy said to Art, "and there will be a shell every quarter-mile or so. The extreme heat and radioactivity of the atomic explosions will convert the iron into ionized iron vapor." He paused and looked brightly at Volson, who had just taken a stack of sandwiches from the pneumatic tube. "Metallic vapors are particularly conductive in comparison with ordinary gases. Ionization increases that conductivity, and I hope that the resistance of a column of ionized iron vapor

to the Moon will be less than the resistance of eight hundred feet of air at practically one atmosphere—especially with a sharp point to lead the current."

Art Volson said fervently, "I don't wish Doctor Reynolds any bad luck, but have you thought what would happen if he should be found about now?"

Tommy's lips tightened and he sucked in a quick breath. "There's only one thing to think about now: can we stop the Conduit? If that works, then we can start thinking about the invaders." He stopped. "I'd like to call Sharon and ask about Doctor Reynolds, but I don't dare. Somebody might overhear."

At eleven o'clock, they emerged from the tunnel into the private office in the Floating Gardens. They closed the closet-door, walked across the glowing glass rug, and went out. Distal drew a deep breath. "If this doesn't work, we won't be back this way again." Art said nothing.

Out on the street the crowds were sullen, muttering, ominous. They reached the edge of the friction zone. It was nearly three miles from the Conduit by that time. The Army had saddle horses and infra night glasses waiting for them. They mounted and rode in silence, wet saddle-leather creaking, hoofs making sucking sounds in the mud.

They rode over a hill and Tommy felt suddenly cold along his spine, for there were two hundred people. By the light of flashlights and electric caps he could see men and women. They were waiting for him.

A tall, gaunt figure seemed to rise up in the dark at the head of them. An electronic flashlight shot over Tommy's face and blinded him.

"That's the man," said a harsh voice. "He's the one. Let's get him."

TOMMY COULDN'T see the face, but he recognized the voice. He

heard the crowd begin to rumble in hoarse throats, and now he knew why the streets in Cleveland had not been as noisy as before. The people had known about this. It chilled him, for that meant a planned attack.

The crowd was moving toward him. His horse shied nervously. Tommy Distal braced himself. There wasn't any use to try to run, because he couldn't. He leaned forward in the saddle and rode out to meet them.

"Who's your leader?" he called. "If he's not afraid to be seen, let him show himself."

Half a dozen lights played over the deeply-lined face of Gordon Somerset.

Tommy stood up in his stirrups and shouted, "That's your man! That's Gordon Somerset, vice president of Atompowerinc! Production manager! He's the man who turned on the Conduit! He's the man who wanted so much power for nothing that now we haven't *any*! He's the one you want! Take him away!"

Somerset turned, for once uncertain. He had been so intent, and now the sudden turn of accusation had him floundering.

Art Volson touched it off. "That's Somerset!" he yelled. "He's the man we want!" He rode at him.

Somerset turned angrily, cursing—and that did it. The mob poured over him.

Volson swerved away. He and Tommy rode by as fast as their horses could carry them against the friction field.

Tommy took off his hat and wiped the sweat from his forehead. "That was close," he muttered. "I guess Somerset wanted to get rid of me."

They reached the little station. Wickware was there, looking sleepy and haggard. "I been scared," he said. "People roaming around the country

all day. I'm glad the Army's here."

"Everything is under control," Tommy said casually. "Go home and get some sleep."

The cavalry was there, and the crews from Atompowerinc. Tommy had some of the soldiers set up searchlights to play on the great aluminum-painted pipe that lay far above them. It almost seemed they could feel it throbbing with its incredible load of energy. Then he organized the men in crews. One crew carried liquid helium, a fifty-pound cylinder on each man's back, up the long ladders that climbed the great gray eight-hundred-foot piers that supported the Conduit; he left half a dozen cylinders on the ground. A second crew carried miscellaneous items. A third crew had instructions to drench one leg of the base of the pier with helium at a signal. The cavalrymen began to rig hitches of ropes and chains around the pier-leg, while a red-haired stable-sergeant used an electrified prod-pole to get his horses lined up in teams.

Distal said, "That's progress for you. Fifty years ago, those things were used only in loading-pens and rodeos, but now even the Army uses that six-hundred-volt charge in place of a kick in the flank." He went up the pier. The pier-legs were crawling with men. One asked fearfully, "What will happen to us when we get up there right on the Conduit?"

"Nothing," Tommy assured him. "You won't be in any more danger walking on the pipe than you are here on the ground."

"That's a lot of electricity," the man said slowly, looking up at the pipe that had by now become a symbol of malevolence.

Tommy chuckled shortly. "It would turn you into vapor in a hundred-millionth of a second," he said. The man was silent.

7

THEY SET up operations on top of the pipe above the pier. In the grayness of low-hanging clouds and the constant cold drizzle, the Conduit was huge and foreboding. The men, with searchlights playing over them, climbed the ladder up its curving sides carefully, as if they thought they might break the magnesium rungs, and on top they stepped softly on the catwalk as if they were afraid to disturb the Conduit. They worked steadily, in a grim silence that was broken only for low, terse sentences.

"Stack the helium along the walk," said Distal. They did. Tommy used a hacksaw to cut out a section of the walk, and at that point he opened a cylinder of helium and began to pour it over the hexafluoride-impregnated neocresolone that acted as the Conduit's outer insulation.

"The helium, hitting the shell at around two hundred and sixty degrees below zero Centigrade, ought to cool the shell considerably," Tommy said to Volson. "It's a shame there's gas inside. If it were solid, the helium would cool it so that electrical resistance would be practically nil—but that's all right. When we get through here, the resistance will be plenty low."

They spotted the two airships by their lights, drifting through the dismal sky toward the Conduit, their engines now silent. Tommy watched them, the *Luna* ten thousand feet above the *Mars*.

He turned his slicker-collar up against the rain. "It's a good thing the wind is almost non-existent," he said. "With friction increasing as the fifth power of the velocity, a wind of twelve miles an hour would tear the Conduit out by the roots."

Volson stared at him. "You're going

to anchor those two ships to the Conduit?"

"Have to." Tommy looked to the north. "There's an artillery battery that has started firing," he commented. He looked to the south. One of the big oscillating searchlights was sending its beam through the drizzle. Tommy stiffened. "Do you see that, Art?" he said in a low voice.

"What?"

"A brown cloud. The creatures have landed there! They know what we're going to try and they want to stop us!"

"You imagined it."

But the searchlight swung around again, and there was no doubt. It was a huge cloud of bromine gas that boiled and seethed. The Army technicians must have seen it, for the searchlight stopped its steady motion, swung back to the center of the cloud, and hung there.

"Do you suppose it's coming this way?"

"I don't know. They're two miles off, I'd say." Distal stared. "I'll go down and reassure the men. Whatever happens, we've got to keep going and complete this job. We've got to be ready at sixteen hundred."

He went down. The Army had three lights on the cloud, and ships could be seen sliding through the haze to land within the bromine area. "What are we going to do?" asked the communications sergeant.

"Stay on the job," said Tommy.

"What if that cloud comes this way?"

"It will. But let's hope it comes slowly."

"Can't we have the Artillery drop a couple in it for luck?" he asked uneasily.

Tommy shook his head. "It wouldn't do any good." He went back up on the Conduit. The men worked in a sort of hopeless desperation. Art watched the brown cloud. "I think it is moving toward us."

"Fast or slow?"

"Slow."

"Maybe they can't navigate too well in the mud."

THE TWO dirigibles were almost over the Conduit. In the searchlights they could see the silver-colored magnesium cable trailing from the lower one.

"Are you going to try to ground the Conduit on the moon, sir?" asked a man who had been a technician in Atompowerinc's laboratories.

Tommy nodded, his eyes on the maneuvering ships.

"That cable isn't anywhere near big enough to carry two hundred billion volts."

"No, but maybe this juice will act as lightning acts. If we give it a good conductor to the top of the top airship, the electricity should first send out a feeler which ionizes the materials in its path. That lowers resistance, and it sends out a bigger feeler which ionizes a bigger path. And so on. The magnesium cable wouldn't begin to carry all the juice in the Conduit, but I think it will lead the electricity in the right direction."

"Why?"

"Electricity tends to flow in a fairly simple direction. At its speed it has considerable inertia. Also, we're going to offer it something it always likes—a needle-point to build up potential."

The man shook his head. "I don't see how you expect to make it jump two hundred and forty thousand miles to the moon when it's only eight hundred feet to Earth." He looked at Tommy and his face went pale. "Mr. Distal, do you think it *will* ground on the Moon?"

Tommy stared at him as if he didn't see him. "I don't know."

"What will happen if it grounds on the Earth?"

"I don't know that, either," Tommy said shortly. "Probably split the continent wide open."

The trailing magnesium cable touched the Conduit as the ships floated almost stationary overhead. The men fastened the cable to the catwalk on both sides of the place where the men were pouring helium, while Distal watched the blackening sky. "If a wind comes up, we're sunk. We can't hold these ships against anything more than a breath of air."

Fifteen thousand feet above, the crew of the *Luna* was jumping off in parachutes. Volson said, "They're coming down awfully slow, aren't they?"

"Yes, they're—look out!"

A man with a heavy rope was watching the ships. He misjudged his step and fell against the man who was toying the cable. The second man lost his balance. He screamed and dived headfirst into the blinding beam of a searchlight.

The man with the rope turned white. "I killed him," he said hoarsely.

But Tommy reassured him. "Don't worry; he won't be hurt. He might break a leg, that's all. About like falling in a parachute. He'll float down. He'll practically reach terminal velocity of ten miles an hour in the first second. When he gets his breath he'll have plenty of time to straighten out. It'll take him half a minute to drop eight hundred feet."

The man stared and then looked over the side. "Are you okay?" he shouted.

Tommy grinned for the first time that night. "The man will be down before the sound is."

A minute later an answering slow shout came, "All okay."

ART WAS watching the north. "There's the signal from the Army. They're firing."

"They've been firing since forty hundred," said Tommy. He surveyed the area on top of the pipe. "I want about three men," he said. "Everybody else down."

"Tommy, the cloud!"

Distal looked up with a jerk. Invol-

untarily he took a step backward, for it seemed the brown mass was almost on them. It bore down upon them like a seething mountain.

Art said tightly, "How close do you think it is?"

"I don't know. Open these cylinders."

They began to open the rest of the helium cylinders and let the contents flow over the Conduit. Tommy glanced at the cloud, boiling closer, and said tersely, "We'll just about have time to finish the job."

He stood up straight, one man against the Conduit. Almost he could feel the mighty power of the big pipe, pulsing and throbbing beneath his feet.

He turned. "Everybody down. Fast!"

He himself took one look at the brown cloud, sucked in a deep breath, and jumped.

It was like floating through water. He hit the ground on his toes, pulled his feet out of the mud, and ran to the command post. "What does Artillery say?" he asked the sergeant.

"All is ready, sir. All fuses will be exploded precisely at sixteen hundred centichrons by remote control. They will send up a rocket in Cleveland to give ten seconds' warning."

Distal went back to the pier. The men were three fourths of the way down. He looked at the cloud and momentarily was elated, for its movement toward the Conduit had stopped. It was still several hundred feet away; the creatures must have sensed the danger from the Conduit. But Tommy's exultation turned into a cold chill, for across the muddy ground toward the Conduit came five aliens abreast, their short legs barely holding them off the muddy ground, their big red heads weaving, tiny eyes unblinking in the searchlights. The broad black bands across their backs undulated from side to side; their heavy tails dragged in the mud. They were already half-way to the pier and coming fast.

Tommy glanced again at the pier. The men were beginning to jump off and float down. Tommy, tight-lipped, wheeled to the stable-sergeant. "Think your horses can break it?"

The grizzled sergeant said, "Yes, sir, we'll pull it out from under."

Tommy raised his arm. Six men waiting twenty feet above the ground opened cylinders of liquid helium and began to drench the girders of the pier. Tommy looked at his watch and said tightly, "Pull it as soon as the rockets go off and the men are down. Give me that prod-pole."

"I need that," said the sergeant.

"Use a piece of rope." A shout came to him. He spun around to look. Art Volson had landed on the far side of the Conduit and was in the path of the advancing creatures. He got up but one leg crumpled and he went down. The aliens raced toward him.

TOMMY SNATCHED the prod-pole from the sergeant's hand and ran at full speed through the mud. Art was trying to crawl away. An alien reached him and slid a huge jaw under him. Tommy made a flying leap and stabbed at the monster with the prod-pole. There was a blinding flash and the creature disappeared. Art was blown ten feet away into the mud. Tommy was on his back. He got up and looked for the other invaders. They had by-passed him and were headed for the pier.

Tommy saw what could happen. The aliens would scare the horses, and the horses would bolt before the rockets exploded. Then the Conduit would ground on the Earth.

Tommy raced after them. One after another he vaporized them. Each explosion threw him into the mud, but it was a soft concussion that didn't tear. He got the last one and turned to face Volson, hobbling for safety. Art's face was white and strained. "They're coming," he said. "Hundreds of them!"

Tommy stared. The ground was

covered with a black-and-red wave, advancing from the cloud. He knew it was no use; not even the prod-pole would do any good against so many. He looked back at the sergeant.

Distal saw a welcome sign in the sky—a red star-shell. Ten seconds. He helped Volson to the command post. The wave of invaders was at the pier when there was a world-blinding series of explosions in the sky. A million bombs were detonated in a two-hundred-and-forty-thousand-mile pathway to the Moon, and the intense white light of millions of degrees from each one lighted up the earth like full day, even through the gray-black atmosphere of rainy night.

Tommy raised his arm. He struck the nearest horse on the rump with the pole, and at the same time the wave of aliens, coming around the pier, emitted a hoarse growl. The hundred and twenty horses leaped as one, with their haunches pulled in against the age-old fear of attack.

Art said sharply, "It's going!"

The great tantalum pier was not designed for stress like that. It shattered; a huge I-beam gave way. The horses strained, and suddenly the entire leg of the pier crumpled.

Tommy stared upward. "Back!" he shouted. "It will fall this way!"

The Conduit began to tremble. Far overhead, the *Mars* was a great dark shadow, while far above her, the *Luna's* sleek sides glistened as the moon showed through a break in the clouds as a great reddish-yellow ball.

Through his feet Tommy felt the sharp cracking of the neocrosolon as it broke on the top of the Conduit. The big pipe was sagging against the gray sky. He glanced at Volson. Art was taut, his deep eyes little more than pin-points in a slender white face.

TOMMY STOOD tense now, dread-ing the break. The Conduit was constructed with a large margin of supporting strength, but no material

ever made had been designed to give a specific performance in the region of absolute zero.

Presently he heard the sharp crack and then a high whistle of compressed nitrogen escaping. He put the infra-red glasses to his eyes. Great pieces of the insulation were floating down. The Conduit was sagging more slowly than he had expected, perhaps from the lifting power of the two airships; but the insulation, weakened from the great cold induced by the evaporation of liquid helium, and squeezed from both sides by the pressure created from the bend in the pipe, was breaking open on the top. The Conduit canted a little, and Tommy saw a six-foot hole in the neocrosolon, with nitrogen at high pressure blowing the pieces into the air.

Tommy did not need glasses to see what happened next. First, a thin streamer of fire darted out of the open hole in the top of the Conduit and fastened itself to the cable leading to the *Mars*. This lasted for an instant. Tommy looked upward at the *Luna*. The same thin streamer of fire, like a striking snake, darted from the copper needle whose point protruded from the top of the *Luna*. It shot into the stratosphere for fifteen miles and then winked out. The magnesium cable from the Conduit to the *Luna* was now a streak of white-hot metal.

Tommy began counting his pulse aloud, his voice so tense it was a croak. "One thousand. Two thousand. Three—" A man looked at him. At the count of four a point of light appeared on the moon. It was only a wink as they saw it, but Tommy knew it must have been many miles long.

Then vivid fire began to curl from the break in the Conduit again and lose itself in the *Luna's* lightning-rod. This time it leaped from the point of the needle and shot up a hundred miles, lighting the earth as far as they could see. Then the shuddering thunder of the first spark came to them, and at

the same time the hydrogen in the gasbags of the *Mars* and the *Luna* exploded into masses of colorless fire.

Tommy watched the moon. Four seconds later an enormous tongue of fire licked out at Earth. This time it was long enough to be seen as a streak. A third spark poured from the Conduit, and this time went into space a thousand miles. And before the answering spark came from the moon, the thunder-clap reached them from the second flash. It deafened them, and Tommy realized numbly that the friction ray was already breaking down. He put his fingers in his ears.

"Static electricity travels about half as fast as light," he said to Art, before he realized that Volson couldn't hear him. He knew that as the gap grew shorter, the interval between flashes would be longer.

It was two full minutes before the awful voltage of the Conduit poured forth its full fury to satisfy the moon's potential. At the last of some thirty lances, each one bigger and longer and louder, until the earth was lighted in an incandescent flash unbearable to the eyes, and the thunder was a constant rolling cosmic drum that made their blood flow like molten lead, with the space between flashes nearly eight seconds apart—at the last the full tremendous power of that Inconceivable two hundred billion volts poured through the break in an arc of pure current as thick as a horse's belly.

It curled into the place where the magnesium cable had been, for the cable had long since vaporized, but now the air itself was ionized and its dielectric strength broken down, and the electricity poured along that path as it would have along a metallic conductor—as it did, between the two planets, along the pathway of the ionized iron vapor. It shot upward through space that had been occupied by the *Mars* and the *Luna*, bits of which now were beginning to fall to earth.

8

THE LAST stroke was from the Conduit alone. Enticed by the thousands-of-miles sparks that had darted out from the moon, the great arc from the Conduit lashed through space and spent all the furious violence of its unbelievable energy on the Moon.

The Conduit was grounded.

By this time the men were lying flat in the mud to escape the tornado of air that accompanied the blasts of thunder from previous stabs of the Conduit, but Tommy was on his back and held his glasses on the Moon. He saw that last giant spark bury itself in the Moon, and then he saw the Moon try to eject it. For a moment the Moon seemed to quiver in response to being stricken. Then it erupted to escape the titanic pressure of the gases generated in its interior by the Conduit.

A great mass of rock rose from the Mare Vaporum, almost in the center of the Moon's disc—a mass that amounted to several thousand cubic miles. Then he was aware that the sides of the Moon were spreading outward.

"It's splitting!" he said hoarsely. "The Moon is splitting!"

No one could have heard him. He didn't hear himself through the incessant rolling thunder of the lightning.

The Moon was separating into two parts, very nearly equal. He lay there in the mud a long time, watching. The thunder died, but still they all seemed unwilling to move. It was almost as if they were afraid by standing they would induce the Conduit to strike back at them.

Finally Tommy sat up. He looked around and discovered that he was too far blinded to see anything near him. His head was so filled with ringing thunder he could not hear. He sat there

long enough to wonder what was happening up there in the sky, 286,000 miles away. The Moon had split, but would the sections be pulled together again, or remain apart? Was one part headed Earthward? And he wondered about the first great mass of rock; had that left the main body of the Moon with enough velocity to escape the Moon's gravitational influence?

Then he heard Art say, in a scared voice, "Some show, Tommy." It sounded irrelevant, but Distal knew what pressure it concealed.

"Do you suppose the Conduit is really stopped?" asked the Signal Corps sergeant.

"Yes," said Tommy. "The Conduit itself is burned in two there where the break was."

"How can we be sure?"

"Fire a flare."

They did. It hissed straight up into the sky, burst at the top like a star-shell.

The sergeant watched with his mouth open. "That's the most wonderful sight I've ever seen."

The sky to the north lit up with a flare, then with dozens of flares, hundreds of them. The men began to yell, to shake hands.

Tommy looked at Art. "We've done it," he said. "Now we'll have a chance to go to work on the—" He wheeled. "What happened to the aliens?"

The searchlights were still playing on the south, but now there was no brown cloud, and there were no creatures on the ground. "We got rid of that bunch anyway," said Tommy.

"When they get the Conduit going again with a reasonable voltage, maybe Colonel Moorhead can go to work on his projecting weapon," said Volson.

"He probably has it all ready and waiting for the friction zone to end."

THEY STARTED back through the mud. The sergeant took them in his signal truck to the city. He pulled alongside a taxi and Tommy and Art

got out. As they thanked him, his radio began to blare. "All military police are urged to keep watch for Thomas Distal and Arthur Volson. Distal is about thirty-two, light hair, six-feet-one, and weighs one-ninety. Volson is five-ten, dark-haired, weighs one-seventy-five, and is about the same age. Both men are wanted by Intelligence for destroying evidence early this morning pertaining to the invaders in Vermont. Information should be routed direct to G-2 in Washington."

The sergeant leaned half out of the car door and looked at Tommy and Art. "Well, whatta ya know about that?" he asked in a suddenly nasal voice. "Them two guys destroyed evidence. They oughta get the works." He got back in and drove off fast.

Tommy looked at Art and grinned. But Volson was serious. "It isn't good," he said. "That lieutenant turned us in for blowing up the creature. G-2 might not take it lightly."

Tommy sobered. "Probably not," he said. "Let's get back to Doctor Reynolds' office and see if anything has turned up."

They rode to within three blocks of the Tower. "Close as I can get," the driver said. "The mob is too thick around there; everybody wants to break in. Guess they're pretty sore about things."

They walked. The Floating Gardens were on the other side of the Tower. They worked their way through the crowd slowly to avoid attention. They turned the corner to walk along the side of the great building where the laboratories faced. Then Tommy gasped.

A man was hanging under the argon sign that said, "Dance All Night." He was hanging by his neck, from a rope, twisting and turning in the kaleidoscopic colors of the sign.

Art grunted as if he had been hit. "Somerset!"

The crowd was yelling hoarsely under the former production manager

of Atompowerinc. Tommy shuddered. Someone threw a lighted torch at the body and it flared into white flame. "They doused him with hundred octane."

Tommy swallowed and began to work his way past. He didn't look at Somerset again, but the memory of the flames leaping up the man's body was like a white light in his brain.

FINALLY—it seemed hours—they were through the block. It was turning light. They went another block and let themselves into the Floating Gardens. They went into the closet, through the tunnel, into the Tower. The spiral escalator wasn't running. They went up the private elevator to two hundred. Distal went in through the side door—and gasped. "Doctor Reynolds!"

The white-haired man looked up from his desk, haggard, "Glad to see you, Tommy."

They shook hands with him. "I hope you're all right, sir."

"I'm all right. But I'm afraid there's trouble, Tommy."

"What's that, sir?"

Reynolds looked around. "These men are Secret Service Operators. They have orders to pick you up for using my name to make illegal use of Army equipment."

Tommy went cold. He stared at the three men. One stepped forward. "Thomas Distal, you're under arrest."

Art stepped indignantly, "But we stopped the Conduit!"

Tommy added eagerly, "At sixteen hundred; we shorted it on the Moon."

Reynolds looked at them. He said nothing for a moment. Then he groaned and sank limply into his chair. "That's what all that means," he said. "At the time you shorted the Conduit they were experimenting with the generating plant at Rifle. When the Conduit went out it blew all the tubes in the plant. It will take days, or maybe weeks, to make enough to repair the

plant—and in the meantime all of North America is without power. There isn't one tenth of one per cent of the necessary capacity in private power plants over the country."

He rubbed his face with his hands and shook his head. "We're no better off, as far as the invaders are concerned," he said. Acting a little dazed, he picked up a piece of green paper torn from the teletype. "Colonel Moorhead rigged up a temporary power plant at Inyokern to try his projector." He threw the paper into the wastebasket. "It failed. We are defenseless. And there are now over a hundred landings on the continent. Everywhere there are bromine clouds, vegetation left snow white, people dead. The only ones who aren't dead are those who got away before the invaders came."

"Let's go." The Secret Service man held Tommy's arm.

"Wait a minute," said Tommy. "Get Washington on the telephone and tell them what we did. Tell them—"

"There's no telephone," said Reynolds. "There is no power to run them."

"Use the radio, then—the stand-by equipment. That runs on batteries."

Reynolds sighed. "The splitting of the Moon has disrupted the magnetic currents in the Heaviside layer, and ordinary radio is useless. All you get is static. Some unusual ionization, I suppose." He sounded tired.

The Secret Service man said, "You satisfied? They can put you away for a thousand years."

He got Tommy's arm, and Distal lost his temper. He swung clear around and ended with his fist in the Secret Service man's stomach. By that time Art Volson had the other man from behind, and a pistol fell to the floor. Dr. Reynolds stared out of the Window.

"What do we do with 'em now?"

Tommy was covering them both with a pistol he had taken from the first man. "Get the fire parachutes."

Art fastened the harness from behind. Then Tommy said, "March out of the window."

The first man was angry enough to chew a mouthful of vanadium carpet tacks. "Brother, will you pay for this!"

"Maybe," said Tommy. "You going to march, or do I have to shoot first?"

The two men marched. Their chutes opened, and they floated down. Tommy laid the pistol on Dr. Reynolds' desk and chuckled. "It will take them a long time to walk back up two hundred floors."

But Dr. Reynolds did not smile. "I hate to tell you this," he said, "but the worst is yet to come."

TOMMY STOOD suddenly petrified. "What's the worst?" he asked.

Reynolds slumped down in his big chair. "I could have called Washington for you on the visicast. That doesn't depend on the same layers as radio, and most of the stand-by power has gone into keeping that communication open across the country."

"Then why didn't you?"

"Washington wants you for more serious things, Tommy; the charge of using my name is only a technicality. What they really want you for is the probable destruction of millions of dollars worth of ships."

"Ships? I haven't been near a ship!"

Reynolds turned toward him.

"Yes, but—"

"You've heard of tides?"

"You know what makes the tides?"

"Sure. The Moon. But—" Tommy Distal broke off with a low groan. "Do you mean to say the tides are messed up too?"

"At the last information, the tides on the Atlantic were failing to reach their scheduled marks. They suddenly reversed themselves two hours ahead of time and left a great many ships stranded in shallow channels. The Bureau of Rivers and Harbors want you taken into custody for tampering

with shipping ports, while some of the major lines are talking of suits for damages."

Art said, "I think we'd better get out of here."

Tommy frowned. "I don't like to run."

"I don't either—but it's mighty handy sometimes."

They started down the now unmoving ramp. They got down about ten stories when Art looked down the well and sputtered, "Those guys are coming again. They must work on a commission."

Tommy had lost all desire to fight. "We'd better go back up and just sit down and wait, with our hands in the open. They aren't going to be happy when they get to the top."

IT WAS QUITE a while before the Secret Service men came in. Tommy said quietly, "We surrender."

The big man stuck his nose in Distal's face. "You wouldn't make just one little move so I could poke you one, would you?"

"For once," said Tommy, "I'm in enough trouble already."

The man pulled him to his feet. "If you change your mind, bud—"

A STRIDENT bell came from one screen. Dr. Reynolds put down his coffee cup.

A voice said, "This is a special visicast from the Naval Observatory. Emergency authorized by the FCC and the Office of Defense and Internal Security. The observatory staff, at sixteen hundred centichrons this morning, noted that an electric spark appeared to travel from the Earth to the Moon. The Moon was split into two approximately equal parts and a third smaller part. For some hours, radio communication has not functioned and tides along the Atlantic coast and presumably all over the world have been thrown off schedule, and it was feared for a time that the tidal functions of the

Earth would cease, but in recent hours it has been observed that the two large parts of the Moon are now revolving about a common center of gravity in a catastrophe-created two-body system.

"The smaller mass also has been checked by the gravitational pull of the two larger masses, and will probably join one of them or go into an orbit with them. Experts on the observatory staff believe that with the establishment of this system the tides will resume their former rhythm, as the two main bodies are expected to be less than twenty thousand miles apart when they reach equilibrium with the force imparted by the explosion. The best advice for residents of this country is to remain calm. The Earth's lunar satellite will present a considerably different appearance, but the total effect of its mass and gravitational attraction will be much the same as before. We now relinquish this channel to a spokesman for the Office of Security."

The screen was lighted. The two parts of the Moon were large in the screen. Their motion could not be seen, but at least one side did not look familiar.

"The left half," a new voice said, "has already revolved at such speed that for the first time in man's history we are enabled to view the so-called dark side. This is the side upon which the invaders had established a base, and this broadcast is now given you because in the last few centichrons it has been definitely established that the invaders' ships are being destroyed by electric sparks as fast as they land or try to take off."

Tommy stared. The left half of the Moon was a mass of tiny winking lights.

"Spectrographic study shows many unknown lines which correspond to those on the spectrograph of the invading ship that exploded in Vermont. It is too early to theorize, but authorities feel that due to some providential

circumstance the invasion has taken a different turn."

Doctor Reynolds was sitting straighter. Art said, "Do you suppose—"

"We better go," the Secret Service man said.

The teletype was humming. Reynolds watched it and then tore off the sheet.

"Special code dispatch from Defense HQ," he said. "Too early to forecast, but thousands of invading ships all over the continent are now leaving. Two clouds in West Texas reported lifted already. It is believed the invaders are withdrawing." Reynolds looked at Tommy Distal. "Can you explain that?" he asked.

"Sure," said Tommy. "The Moon is charged with all that juice that was in the Conduit. The Moon's potential has changed considerably. Now it has a *positive* potential. In plain words, it's just busting with electricity. Electricity in a body creates fields of force. When you break a field of force, you make a spark. Is that clear?"

REYNOLD'S smile broke into a slow grin. "With these electricity-hungry ships and their entities with negative potentials, every time a ship lands or tries to take off, a spark will jump to them from the Moon. And sparks destroy them!" Reynolds jumped up, quite agilely for all of his hundred and thirty-six years, and seized Distal's hands. "You've done it, Tommy! You've whipped the invaders single-handed. Every one that lands on the Moon will be atomized. And those that take off will go the same way." He shook hands with Art Volson, too.

The Secret Service man said, but he sounded a little uncertain, "Are you going with us, Mr. Distal?"

Dr. Reynolds said, "Look, men, let me take personal responsibility for Tommy for a few hours until we can get this straightened up. I think I can

clear him of everything now."

The Secret Service men consulted. One called Washington on the visiphone. Then he said, "Will you report at two o'clock this afternoon in federal court, Mr. Distal? Headquarters doesn't think the charge will be pressed, but we have to go through the motions anyway."

"Okay," said Tommy.

They left. Tommy gazed after them and said, "Did you hear what he said when he arrested me? He called me 'Thomas Distal.' Does that mean I'm growing up?"

But Doctor Reynolds was serious. "There's this other matter. I got you in bad by denying that I had anything to do with the Army material, before I knew what was going on; but I can fix that by denying that I denied. It may confuse Washington, but"—he smiled—"I daresay Washington has been confused before. At any rate, when the entire facts of the last few days become known, and your work, Tommy—er, excuse me—Thomas, I think there will be something of a revolution in the attitude toward men of your generation. It may be slow, but it will come. The main thing is, the invaders are gone, and the Conduit is back under Man's control."

"Does that mean," Tommy asked, "that Art and I will have jobs?"

Doctor Reynolds looked harassed. "Well, it will have to pass the board, of course; and then we'll have to wait for an opening. Perhaps somebody will retire, and then I can work you in. You can be assured that I shall do all I can—"

The door blew open. Sharon burst in, gasping. She ran to Tommy and said breathlessly, "Tommy, I just came through the laboratory section." She gasped for breath. "Tommy, you've got to do something! Richard Somerset has painted a picture of a man being burned to death under the dance-floor sign—and he doesn't realize it's his own father. Tommy, do something

quick!"

"My private elevator still has power," said Reynolds.

The three got off downstairs and ran down the hall to 112. Richard Somerset was standing before an easel in the center of the big laboratory.

"It's my masterpiece," he declared. "I won't ever have to work in a laboratory again. Now I can prove to father that painting is worth while." He stood back proudly. "It's gruesome," he said, and added in a whisper, "but it's powerful—a man, a human being, hanged and burned. It expresses all the awful hate of humanity. Maybe it will even make human beings feel different toward human beings."

Tommy Distal took one look at the picture of the man in flames, the argon light above him. It *was* a masterpiece.

Tommy clenched his teeth and stepped forward. He seized the frame in both hands. He twisted it until the wood broke. Then he took hold of the canvas and tore the picture down the middle. He continued tearing until the painting was in strips. Then he turned to young Somerset. "You must not," he said tauntly, "paint things like that. You must not."

Richard had tears in his eyes. He shook his head and looked at the floor. "You want me to work in the laboratory, too?" he asked.

Tommy said fervently, "Goodness, no. You can paint the rest of your life."

"Father won't let me."

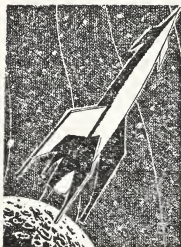
"I think he will."

"But this laboratory—he assigned it to me." Richard Somerset looked around, bewildered.

Art Volson stepped up. "Never mind that," he said. "We're looking for a good laboratory anyway. You can have a corner and paint all day."

"What can I do?" asked Sharon, her brown eyes shining.

"You?" asked Tommy, and looked at her softly. "You make my coffee every morning before I come to work."



THE CLOCK PARADOX

Special Feature

by Isaac
Asimov



FIFTY YEARS ago, Einstein and some of his predecessors introduced us to the wonderful world of great speeds.

Suppose Tom Jones left Earth in a spaceship and sped off at nearly the speed of light. Everything on his ship would be shortened in the direction of motion. His ship would seem *to us* to be a flat wafer (flat side forward). A yardstick on his ship, if pointing in the direction of motion, would seem, *to us*, only an inch long, perhaps.

To Jones, however, everything would seem quite normal. His ship would still seem, *to him*, to be ship-shape; his yardstick exactly one yard long.

In fact, to him Earth would appear to be travelling at nearly the speed of light. *To him*, Earth would appear to be a disc; and the yardsticks back home, if facing along the direction of motion, would seem an inch long.

But then, when Jones returns to Earth and lands, he is once more travelling at the same speed we are and his yardstick matches ours exactly. We can't tell from the yardstick whether it was ever an inch long just in appearance, or whether it was an inch long in reality. So it doesn't matter.

But now let's consider something else. Time slows down with speed. If Tom Jones in his spaceship were travelling at nearly the speed of light, his clock would seem to be ticking quite slowly *to us*. His heartbeat, the chemical reactions in his body, all motions on board his ship, would be taking place slowly, *to us*.

To Jones, all would seem normal. *To him*, it would seem that time on Earth had slowed down. Once he came back to Earth, and he and we compared clocks, we would find that time was progressing at the same rate for both of us once again.

But slow time leaves traces of itself. If the slow time were real and not just an appearance, then Jones' clock, even though it were now going at the same

rate ours was, *would be telling the wrong time*. His clock would have lost time compared to ours.

However, Jones would protest that it was our time that had been slow, and our clock that should have lost time compared to his.

Well, then, which is it? It can't be both. This problem is called the "clock paradox" and has plagued theoretical physicists for quite a time.

Recently there was a savage argument in the British scientific journal, *Nature*, on the subject. One group, headed by Herbert Dingle, claimed there was no paradox because actually the slow time was only a matter of appearance, based upon our methods of observation, and had no actual reality. Therefore, when Jones returned to Earth his clock and ours would be on the nose.

Another group, headed by W. H. McCrea, said the slow time was real, but that there was still no paradox. They tried to show that it was only Jones who experienced the slow time and only his clock that would lose time compared to ours.

Neither side convinced the other, but last January an experiment was reported which may have decided the matter. The experimenters couldn't use space-travellers, but they could use sub-atomic particles, called mesons, which are knocked out of atoms by the impact of cosmic rays. There mesons are knocked out at speeds fair-

ly close to that of light, and break up into smaller particles in only a few millionths of a second.

The crucial point is this: If they are brought to rest first, the average lifetime of the particular mesons being tested turned out to be about two millionths of a second. If they are allowed to continue in flight, their average lifetime is about thirty millionths of a second, fifteen times as long.

The explanation advanced is that the flying meson is no more stable than the stationary one, but that time moves more slowly for the one in motion. *To us*, (but not to the meson), the flying one seems to take longer about breaking down.

So it seems now that the slowing of time with speed is real, and not just apparent. It seems that Tom Jones *would* age more slowly during space-flight. If he travelled quickly enough, he could return a century hence, having aged only a year. Of course, he wouldn't have lived *more*; only *more slowly*. His year might have been stretched over our century, but it would seem only one year long to himself.

Still, it might be nice to skip a few difficult years on Earth and hope for something better the century after. It would be a kind of time-travel, but only one way, into the future. If Jones regretted his bargain, it would be too bad; he could never return.



*You'll Find Another Special
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TALE OF THE PIONEER

in Issue Number 33 of

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THE SHADOW BEFORE

by Paul
Janvier

Why did Leona Colbert
become less and less
substantial, once her
mother arrived?



THE TAXI settled to the ground in front of Colbert's house, and the old woman began to climb out. She eased her heavy legs out of the door, and pushed herself off the seat cushion until her wrinkled black shoes, with her thick ankles bulging over the tops, reached the pavement. Holding a black purse, she came slowly up the path, setting her feet carefully and slowly. She was thick-bodied, dressed in a black wool coat; her head was a shade too big for her body. Her face was impassively sketched in seamed lines.

Colbert, watching her, tried to find something in her dress or expression that would sum her up. There was always some one tag that characterized the whole person—a tilt to the jaw, or a set to the eyes. Twenty years ago, he'd spent three years doing five-minute sidewalk sketches, and he'd never lost his talent for finding these things. But there was no such one thing in this woman; he received only a general impression of something indomitable moving slowly and unstoppably forward.

She was climbing the porch stoop, putting both feet on each step before raising her right foot to the next, when Colbert suddenly realized his discourtesy. He walked quickly out of the parlor, opened the front door, and hastily crossed the porch, offering his arm for support as she reached the top step. She refused his arm and looked up at him expressionlessly, searching his face while showing nothing in hers.

"How do you do, Mrs. Kovacs," he said, pronouncing it the way Lee had taught him—"Kovash." "I'm Leona's husband."

She nodded. "You are William." It was a simple declarative statement.

The cabdriver brought her suitcase up. She blocked Colbert's move with one short gesture of her arm, opened her handbag, took out an old-fashioned purse, and wordlessly paid the driver.

She snapped the purse shut, put it back in her handbag, and looked at Colbert. "Where is Leona?"

"Lee's in the kitchen, cooking dinner. We didn't expect you this early, and I guess she didn't hear the cab pull up." He said it awkwardly, feeling this woman weigh his every word.

"You will call her, please?"

"Why—why, yes, certainly." Colbert's easy manners were disintegrating under her gaze. He opened the front door. "Will you come in?"

"I wait for Leona."

"All right. I'll be right back." He went into the house quickly, not liking leaving her on the porch, but not knowing what else to do. He went into the kitchen. "Lee?"

LEE WAS methodically mashing potatoes. The exhaust fan over the sink made it hard to hear her answer.

"What?" he asked loudly.

Lee glanced at the roast in the oven before she repeated: "I said, was that mother?"

"Why—yes, it was. I thought you hadn't heard."

"I heard the front door. I wasn't sure. Is she out on the porch?"

"She won't come in," Colbert answered, wondering what had gotten into Lee, now. She certainly didn't seem to be in any rush, and her face was now as expressionless as her mother's. "She wants to see you, first."

Lee nodded. "Yes." She hung her potholder on a cuphook, took off her apron, pushed her bright blonde hair away from her forehead, and went out to the porch. Colbert followed indecisively. Lee'd been the one who suggested they invite her mother to come live with them. Colbert was fifteen years older than his wife—he'd thought it would be a good idea to have someone in the house, doing the housework, leaving Lee time enough to relax from her modelling, and for the two of them to see more of each other

outside the studio. Lately, she'd been growing tense at unaccountable times, and somehow the bridge between them had been thinning by slow degrees.

He shook his head as they reached the porch. There was so much difference in age between them—she was still a girl, while he was turning gray. He'd thought this would be a good idea, but now he wasn't sure.

The woman's expressionlessness had remained as it was. She faced Lee from the head of the steps, while her daughter stood without speaking, just outside the door. Colbert was forced to look at the woman by going up on his toes and looking over his wife's shoulder.

Mrs. Kovacs inspected Lee, and a questioning look grew in her eyes.

Lee nodded. "Yes, it's all right."

Mrs. Kovacs nodded in turn. "I stay."

Lee sighed. "Your room's ready," she said flatly. "Your trunks came; I unpacked them."

The woman nodded as before, and crossed the porch with her slow walk. Lee moved away from the door to follow her into the house. Colbert stepped back to let Mrs. Kovacs pass, not knowing whether she expected some further welcome from him or not.

"Dinner's about ready," he said finally as she came abreast of him. She looked up at him stonily, and he squeezed past her in something close to panic, going out on the porch and bringing in her suitcase.

He ate dinner as silently as the two women. Lee served the food without comment. She took no special care to give Mrs. Kovacs her portions first, and when her mother spoke her only word: "Salt," she pointed to the shaker instead of handing it to her.

Mrs. Kovacs ate with measured movements. Lee stared down at her plate. Faced with this, and preoccupied with his own thoughts, Colbert didn't speak either.

At the end of the meal, Mrs. Kovacs looked toward Lee. Colbert found himself expecting to witness some climax.

"I cook from now on," Mrs. Kovacs said. Lee nodded.

THREE WEEKS later, while Lee posed in his studio, Colbert began to see that the change in his life was permanent. He had to accept Mrs. Kovacs for what she was. The woman was over sixty years old, with a European and Pennsylvania steeltown background. He couldn't expect her to change her mannerisms to suit him.

But Lee was a different matter. He'd never known her in the steel town, nor ever against any background except the one where he'd met her—Greenwich Village, in New York.

Lee had been his best model. Always quiet, but never reserved, she'd always been quick to understand him and the mood of whatever piece he was working on. The work she'd posed for had always been closest to what it should have been. It hadn't taken him long to realize that she was his last hope to get away from the hack lamp-bases and bookends he'd drifted into doing for a living. He'd had some luck after he met her. In due course, he married her and rented this house in Connecticut.

Now Lee's mother had come to live with them—and there was a good deal lost from his wife.

"Please, Lee," he said, forced to take his hands away from the slowly shaping mass of plasticine for the third time in the past five minutes, and Lord knew how many times in the past three weeks. "Try to hold the pose. You're letting your head droop forward. Again."

Wordlessly, she tilted her head, but her eyes stayed dull and disinterested; and though her body held the position, it radiated none of the expression it should have. He might as well have been working from a cast.

"All right," he said, the breath gusting out between his teeth, "take a rest."

"I'm not tired," she said tonelessly.

"You look tired. Take a break." He dropped his spatula rattling down among the other tools and sat down on the couch, searching his shirt pockets. He found a crumpled pack and lit a cigaret with a savage swipe of the match across the striker. He inhaled impatiently.

"Have one?" he asked, extending the pack to Lee, who sat down beside him. She shook her head, and stared at the developing plasticine figure with none of the live interest she'd always shown before.

"What's the trouble, Lee?"

She shook her head again.

"Has this entire household been reduced to sign language?" he demanded in sudden anger.

HER REACTION wasn't what he'd expected. He'd never criticised her posing or her mood before—it was her talent, and a good one. But she showed no sign of hurt pride or surprise at his outburst; she merely assumed a faint replica of her mother's stolidity.

Her mother. There'd been no reaction to the slur on her, either, just as there'd been no reaction to the first sight of each other in two years. But, if Lee had no particular feeling for her mother, it seemed strange she was so willing to give up the cooking and housework and let the woman take over managing the household. Under the circumstances, he'd expected Lee to balk. She didn't; she simply let Mrs. Kovacs take over, and spent most of her time in her room when she wasn't modelling. Was she afraid of the woman?

"Look, Lee—I'm sorry," he stammered. He put his arm around her waist. "You haven't seen your mother for a long time. If she's changed from the way you remember her, or if there's

anything at all uncomfortable for you in this situation..." He stopped, not knowing how to go on. He'd never come across anything like this in his life. The feeling persisted that there was more between Lee and her mother than anything that showed on the surface. He prided himself on his artist's perspicacity, but he couldn't come to grips with this business at all.

"Get to know her better, William," Lee said.

"And what does *that* mean?" he barked. He took his arm away with an impatient wrench. "Do you want me to ask her to leave, or don't you? If that's not the trouble, when are you going to snap out of this coma? You haven't been yourself since she came."

"I've been myself."

He stood up, his lips pulled back against his teeth. "All right. I'll just have to wait it out, then. Break's over; let's get back to the botch."

A BOTCH it was. He found the work fighting him more than it ever had. He began to go over parts he'd already done, afraid to start new ones. Planes fell awkwardly; lines refused to run as they should have; his tools slipped in his fingers. The fusion of his brain with the movements of his hands was broken repeatedly.

Lee continued to pose lifelessly. They were working in five minute spurts now, with rests between—not because either of them was tired, but because he'd look up from his work and find she had fallen out of pose. He tried to talk her out of the blank mood, and got nowhere.

He tried every one of the devices he'd learned while working with the usual run of commercial model, and found them useless. In the studio, as well as everywhere else, she'd completely lost the spark that made her an individual of intelligence and talent—someone to respect, admire, and need.

He looked at the figure in disgust that flared up to anger as he realized the whole basic modelling was wrong—nobody could salvage the thing without starting from scratch.

"I might as well buy a window mannequin and work from her!" he burst out. He turned toward Lee savagely. "I might as well have married one, too!"

"I'm sorry, William," she said lifelessly.

"I don't care *how* sorry you are. You're wrecking this thing."

"Would it be better if you found another model?"

"In this town? Or do you want me to send for one from New York? How much money do you think I've got?" He slammed his fingers down flat on an easel. "Look, I'm *sorry*, but I can't keep this up. *Anything's* better than what I've got."

"All right." She left the studio while he looked after her bitterly, wondering how much it would take to get *some* expression on her stupid face.

HE TRIED to work from sketches, or from a mental visualization of the completed figure, but he found he'd lost that. He took the day off, prowling through the small town, leaving the movie theater in the middle of the first feature, going home and locking himself in the studio, making fruitless studies in an attempt to reconstruct.

Finally, he went back to the figure itself, his mouth twisting with the foreknowledge that the thing was lost, and that in a day or two he'd *have* to drop it and get to those lamps for Sandemann.

Mrs. Kovacs brought occasional plates of food to his door. He took them as wordlessly as she gave them, ate the food or not, as it struck him, and left the plates scattered about the studio, heaped with cigaret butts.

One and a half days of that, and he broke. The figure he had visualized

had become a clumsy mockery of what it should have been. He turned it into a deliberate caricature. He pulled the reaching arms into a hooking grasp, and the bend of the graceful legs into a wrestler's crouch. Suddenly, he lashed out with a vicious foot and kicked it over. It struck the floor more solidly than any felled body and lay distorted and flattened by the impact. He drove the slim, sharp-edged wooden blade in his hand into its torso and burst out of the studio up to the bedroom, where he threw himself on the bed and fell feverishly asleep, his fingers crushing the blanket.

HE WOKE up in the morning, feeling numb and stupid, and went straight downstairs to the studio. He looked around him at the litter, the broken figure, and the casts of some of his work standing around the room.

He remembered Baxley, years ago: "You'll never make it, Colbert. Ever think of commercial design?"

It wasn't an unaccustomed memory. The words were cold, and bit deep. He knelt down beside the figure and began stripping plasticine from the slat carcass.

"Maybe I clean up?"

He turned to the voice. Mrs. Kovacs stood like something of Mestrovic's in the doorway.

Busy with his feelings, he shrugged absently and turned back to the figure, which now lay with its wooden rib cage exposed like a corpse attacked by scavengers. He only half-heard the hitching shuffle of her feet and the rattle of dishes being stacked, and it was some time before he noticed she had stopped. He looked up, and saw her standing in front of a cast.

Short and heavy, she stood in front of the slim *Victory*. She did not move around it, but stood in one spot, her eyes slowly gathering each detail.

He left the ruined figure and went over to her, interested in her reaction.

The unreadable face turned toward him. "You do this with Leona?"

A half-smile quirked his mouth. "The *Victory*? Yes, she posed for it."

"I see photograph before, in *New York Times*, but it was small picture—hard to see anything."

"The *Times*!"

Something lurked at the corners of her glance. "My man buy me subscription. I read."

My God! he thought.

She reached out and touched one of the arms. "Rough," she said. "Not like skin. Like stone."

"That's a stylistic touch."

"Ah. You are sculptor. You understand this plaster. You know how to do, to make how you want. You know plaster, stone, clay—you understand. To be sculptor, must understand such thing. If understand, then you are sculptor."

The meaning of that was beyond him. He shrugged behind her back.

SHE WAS looking up at the *Victory's* face. "Not Leona. Some other woman—maybe little bit like Leona, but not much. Man in *Times* say is ambitious attempt."

"Yes, well," he said quickly, scowling, "it's not meant to be a portrait. *That* is, though." He pointed to a head he'd done of Lee. Mrs. Kovacs turned away from the *Victory* and walked over to it. She stood silently in front of it for several minutes, then inclined her head to one side. "Yes... is like Leona outside." She continued to look at the head. "Was hard?" she asked suddenly.

"In terms of physical work, no," he said, nettled.

"Ah." She looked at him sharply. "You try one of me, maybe? I see how hard is for you."

He recoiled inwardly. A portrait of *her*?

Her eyes dug at his. "Is not strange. You look." She turned her head from

side to side, stepping back to give him a better perspective. "You look," she repeated. "The head is good. You forget about Leona's mama, about old Mrs. Kovacs. I am stranger. You never see before. You just look at the head."

He stood uncertainly, his eyes following the turning of her head. He pressed his splayed fingers against his thighs. What was he going to say?

"I don't know—later, maybe. I have to do some lamps, first."

She nodded. "The lamps. Yes. You make money enough for two to live. How about for three?"

"I think I can manage," he said, irritated.

"All right," she said calmly. "But you do sketch for head now, anyway, eh? You have time enough for that."

She had him in a corner. Besides, he was angry at her dull reaction to his work. "Hold your head steady," he growled.

She complied silently and stood unmoving while he walked around her with nervous, uneven steps. So, he thought. *There's the skull. Slight pitch to the right. She's missing teeth on the left side of her mouth. In the back.*

"You will do?"

"I don't know." He stood behind her, studying the set of her heavy head on her neck. 'I am stranger,' she'd said. His mouth pulled back to one side over his clenching teeth. That she was. If he could peel back the alien stolidity of her...

He realized he was becoming obsessed by whatever foul mood it was she'd brought into this house. But, obsession or no, he couldn't go on as he had been going.

"All right," he said at last.

She accepted the fact without changing expression. Even her eyes showed no change, though he'd expected triumph. "When we begin?"

"Now, if you want to."

"Good. Where I stand?"

"Right where you are'll do fine." He picked up a lump of plasticine he had stripped off the figure. His fingers closed on it, beginning to test their strength with it. They felt stiff, but at least he was working again.

HE BEGAN to block in her features, and a thin flicker of satisfaction touched him as he realized that, even in this mood, he had something of his facility back. He could almost feel the bone structure of the skull under the rough mass that would resolve into her hair. Her left cheek curved in over the missing teeth. There was cartilage that only he could sense shaping her nose and determining the set of her ears. Beneath the rough cylinder of her stumpy neck, phantom body supported the developing, fore-thrust head.

Now, the eyes. He'd left that for last. Just a quick blocking-in would do it—he could leave the rest for later.

He looked up and saw her looking back at him, with a bottomless pit behind her eyes, and his fingers slipped, turning to wood.

Finally, he picked up the spatula for one last try, touched it to the face, and dropped it. He rubbed his closed eyes with his greasy fingers.

"Is not good?" Mrs. Kovacs said. She moved forward, and he stepped out of her way. She looked at the head with a small half-smile and shook her head. "Is not good."

"I think we'll stop for a while," he said hopelessly and sat down on the couch. Mrs. Kovacs sat on the opposite end, the springs sagging under her weight. She grunted as she extended her swollen ankles. "Was mistake."

Colbert looked up sharply. "We'll stick to it." If he was beaten now, he was beaten forever.

"No. Was mistake to make you try. I want see what kind sculptor you are. Now I see what I already think. You are good for lamps. Is nice lamps for

parlor, for living room, but you are not sculptor."

"Mrs. Kovacs—"

"No. Please. Do not make comedies with me, please. You are not sculptor. I am sculptor. Yes." She nodded proudly at him. "I am better sculptor than you who have picture of statue in *New York Times*. Look." She bent painfully and closed one gnarled hand over the exposed slats of the stripped figure.

The wood flowed loose under her hand. She worked it with her fingers, and the wood coalesced into a head of Colbert.

"So," she said. "Is picture of you. You understand plaster, stone, clay, maybe little bit even if not enough for sculptor. I understand... everything. From when I am girl, I see how everything is made—I see how even stone is not hard, but is empty, full of bubbles like bread with yeast. I see deeper—I see how in center of everything is little fires, and I see how to move fires. Yes," she nodded, "from when I am little girl. But my mama says she will tell the priest I do these things, so I do not do.

"Please—hear story, then talk.

"Life is hard. All my years, life is hard. In my old country, I was on farm. My father not my mother's man very long before he die. Much work is divided among few children.

"I am young girl—pretty, like Leona. Then the war comes, and after that I am not young any more. I come to New York, steerage. That is hard, too. Then I work in New York, in the loft. I see good, but the loft is very hot in Summer, and in Winter I put newspapers in my shoes and try to sew with gloves on my hands.

"**T**HEN I meet Mr. Kovacs. We go out to steel mill town. For many years, life is good. But was never easy.

"Then one day, the foreman come

to the house with his hat in his hand. He tells me my man make mistake, slip. So, life is hard again." She raised her face. The seamed channels at the corners of her eyes were sparkling faintly.

"They put steel billet in grave. It is usual thing to do, when man fall. They put up stone with 'Joseph Kovacs.' But it is not like my man, a piece of steel under the ground. I tell priest it is better to bury stone, and put the steel up for marker, but nobody understand.

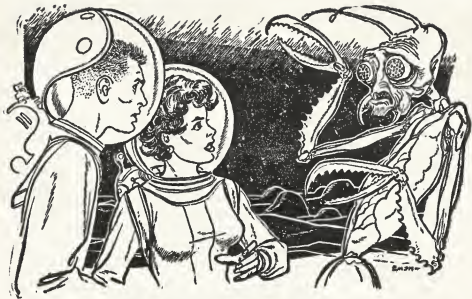
"And then I am lonely. I have nobody, not even my man after work is done. And I am old woman. Old woman is not good for much—cook, keep house, fix clothes for man—but I have no man to do this for. I think 'Who will want you? Who will take you into house?' So, after while, I think 'If you was young girl, like you was, you would find man,' But I am not young girl. I am old woman."

She locked her eyes with Colbert as he started to stand up. "You sit, listen. I am sculptor here, not you." Colbert couldn't stare her down, and a wintry satisfaction settled into her face.

"Then I think more," she went on with her story. "I think, I remember how was when I was young girl. I remember how my mama teach me not do what my brothers and sisters can not do. I think is long time now, and all my life I do what she say, and I am good woman. But now I am old, I am lonely—I must do something.

"Man is difficult—is not wood, is not stone. Man I do not understand enough, but young girl I remember. And so, I make Leona. She find me place. So now is everything all right again. I do not expect much, but you do enough lamps for two to live, and that is enough. I do not need Leona any more."

And upstairs, in Lee's room, he found nothing but drifting air.



The monster looked at the man in horror and disgust . . .

A MATTER OF TASTE

A Fable by A. BERTRAM CHANDLER

illustration by EMSH

HE SAID, "But I don't *like* love stories."

She said, "If we're ever going to have enough money to get married you'll have to write something that will sell. Not like *this* rubbish!"

She walked to the untidy table, picked up a manuscript. "*Vanguard To The Stars...*" she read. "Science fiction!" She sneered as she leafed through the pages. "Spaceships!" She made the word sound like an obscenity.

"But it's not impossible," he ex-

postulated. "A rocket drive... Action and reaction, and all that..."

"It is impossible," she stated flatly. "And you know it. Men are the only ones who'd be fools enough even to dream of such things—and they'd never live long enough to do the necessary research. And women? *We* have more important things to think about."

"Such as?" he asked, not without sarcasm.

"Love—and all that the word im-

plies; children, the perpetuation of our species..."

"And the gratification of certain desires?"

"I said 'love', didn't I?"

She threw the manuscript down carelessly, strode to the single chair, sank gracefully into it. He sat on the unmade bed and watched her.

She is a beautiful creature, he thought. So fine, so strong. And this life that I am leading now, this daily grind of turning out silly adventure stories—although some of them aren't so silly—for the children's magazines isn't much to cling to. I'll never achieve any degree of fame—whereas one good love story, written as I know I can write, would bring me worldwide recognition. It would bring me the money for the marriage settlement, for the marriage... What have I to lose?

She broke into his thoughts. "I'm thirsty. I want a drink."

He got up from the untidy bed, walked to the cupboard where he kept his liquor. He opened a bottle, filled two glasses with the colourless fluid. "It's all I have, darling," he said, handing one to her.

"It's all you'll ever have," she replied, "until you make a success of yourself." She grimaced as the raw alcohol stung her mouth. Nevertheless she drained the glass, passed it back to him. "Another."

She looks lovely, he thought, watching her as she drank. Almost I am tempted. A bachelor's life isn't much. Even so...

"You can write," she said. "Why don't you write something decent? Something that will sell... The way things are, I might get tired of waiting."

"Think of the scandal," he warned, suddenly alarmed. "We may think that we live in an enlightened age, but the lot of the unmarried mother is not a happy one. Children to feed—and

no fat little nest egg to fall back upon."

"Then write a love story."

"But I don't like love stories," he replied.

WHEN SHE was gone he pulled the chair up to the table, picked up his pen.

I suppose there's nothing wrong with love, he thought. We have to have it. It's love that makes the world go round. Courtship is a rather beautiful thing. Courtship is beautiful... The preliminaries.

He doodled absently on a sheet of clean paper.

But does love have to be the way it is here? Could it be that elsewhere in the Galaxy there are other patterns? Now—that's an idea for a story... A planet about the same mass as this, revolving around a similar sun. Atmosphere and climate as near as dammit the same. And the people... By our standards, perhaps, monsters—but *people*, thinking of themselves as men and women. That's logical enough. Any intelligent, dominant life form will think of itself as Man... But I'll have to bring in some strange rituals of courtship—and, of course, some sort of consummation utterly alien to our ideas but, bearing in mind the nature of the people themselves, quite logical.

And these women of ours are so mad on love that the story is bound to sell. Film rights perhaps—they can manufacture very lifelike and frightening monsters in the studios these days...

HE SAID, "But I don't like love stories."

She said, "If we're ever going to have enough money to get married, darling, you'll have to write something that will sell." She walked to the untidy table, and he loved the free, lissome stride of her, the way that her two, pale skinned hairless legs moved



beneath her slender body. She picked up a manuscript. "*Vanguard To The Stars...*" she read. "I love you, darling, for your dreams," she murmured. "I love you for your dreams of the tall, shining ships plunging deeper, and even deeper, into the immensities of Space." "Dreams..."

"But you are working so hard to make the dreams come true."

"I do my best," he said. "This stuff has a certain propaganda value. It makes the people conscious of what *could* happen, what *will* happen..."

"I know," she told him. "I know, darling. But we must be practical. We want children, because *we* want to see our children leading the kind of life you dream about, having all the adventures you write about. We must have money if we are to marry and rear those children. You can make the money by pandering to the gross sentimentality of the masses..."

"All this talking has made me thirsty," he said. "Pour me a drink, will you?"

Obediently she went to the cabinet where he kept his liquor, selected a tall bottle of rosy wine, filled two crystal goblets. One she handed to him, the other she kept in her other hand. She raised it to her mouth.

"To us," she whispered.

"Down the hatch," he replied.

She put the glass down, threw her two arms around him. "Darling," she cried. "Let's not wait."

"What's the rush?" he asked. "We

shall have a long lifetime of lovemaking once we are married..."

She pulled away from him. "There's somebody on the stairs, at the door!"

The tall old man who entered the room glared at the woman. "Daughter! What are you doing here?"

"Nothing, father," she faltered.

"Nothing? You are keeping this splendid young fellow from his excellent work." He turned to the writer. "You know who I am, sir?"

"Yes. Your daughter has often talked of you. I know that you, more than any other scientist, has planted our feet on the very threshold of Space!"

"The threshold? More than that. My ship, the *Thunderer*, has at last been completed. She lies out at the field, waiting for a crew. There have been many volunteers—but I swore that the honor of piloting her should go the man who has done so much to popularize the idea of space travel!"

"This is a great honor," stammered the writer. "To think that I shall be the first man on the Moon..."

"The Moon?" demanded the scientist scornfully. "Our telescopes have told us all we need to know of that dead world! As for the other planets of this solar system—we know that none of them is capable of supporting human life. The *Thunderer* not only has conventional rocket drive—she is fitted with my own invention, the Space Warp. You will take her to the stars; you will find other worlds capable of becoming the homes of Man."

"But, sir, I know nothing of mathematics."

"That does not matter. You will be Captain, not Navigator. You will have the *man's* job."

"And my Navigator?"

"The only one of my students who ever could follow my mathematics. My daughter."

THEY WERE alone in the cabin. They had watched the world dwindle below them and then—like the flame of a snuffed candle—vanish. From their viewports nothing was visible—a negation of darkness as well as of light that was more terrifying than actual darkness would have been. The woman busied herself with various instruments, watched intently the flickering, wavering ribbons of light on the screens. Once or twice she made minute adjustments.

At last, "Captain," she murmured. "We are on course. In precisely thirty one days from now we shall emerge from Sub-Space and fall into our orbit around Arachna, the nearest fixed star..."

"Thirty one days," he said. "It's a long time."

"Not with you," she replied boldly.

She came to him then...

BELOW THEM swam the planet—Planet V of Arachna.

"It is a fair world," he said soberly. "one that could well become the home of our race..."

"We could destroy the ship," she murmured. "We, and we alone, could become the father and mother of humanity on this globe."

"No," he said. "No! We should be betraying a sacred trust—the trust of your father and of all those who toiled that his ship might become a reality instead of only a dream. We must land and explore—and then we must return with our report."

"You are right," she replied at last. "We women have no sense of honor, I

owe allegiance to only one member of my race—you!"

He pushed her away absently. "Get to your instruments. Select me a site where I can set the ship down safely."

"I have already done so," she said. "Do you see that river? By its mouth the ground is level, and there are no forests?"

He approved her choice, then seated himself in the pilot's chair. His skilled, sensitive hands flickered over the keys of the control board. The ship shuddered as the roaring braking blasts strained her structure.

Lower she dropped, and lower, balancing on the pillar of fire that was her exhaust. The ship was dropping through the first high filaments of cirrus now, and the passage of the atmosphere along her sleek sides was a shrill, high keening. Below her gleamed the blue sea, below her the green of fertile land and the yellow of desert shone with a subtler lustre.

"A city!" called the woman suddenly.

He was disappointed. He had hoped that this world would prove to possess no intelligent life, that it would prove to be a house swept and garnished but empty, waiting for its first tenants. Even so, he had achieved much. He, first of all men, had crossed the gulfs of Deep Space; he, first of all men, would bring back word to his home planet of alien intelligences, of strange rites and strange knowledge. His name would live forever in the tribal lore.

He could see the city now with his unaided eyes. He could see the great domes, spaced with geometrical regularity. He could see the great, bare plain to the north of it, and it was there that he decided to make his landing.

Slowly, carefully, he eased the ship down. At last, with a barely perceptible jar, she touched. Only the groaning of the shock absorbers told of the great weight that, suddenly, had

ceased to be borne upon the flaming column of the exhaust.

He cut the Drive. The sudden silence was deafening.

HE WAS looking out of the viewport, to the strange, domed city looming low on the horizon, when he became aware that she was standing by his chair. He turned to look at her, saw that she was holding two helmets that were composed of intricate intermeshings of coiled wire and silvery antennae.

"What are they?" he asked.

"My father anticipated this situation. These helmets will make us, in effect, telepaths. We shall be able to converse with the intelligent beings of this world."

He let her adjust his helmet until it fitted comfortably, then watched while she put on her own. When she was ready he led the way down the ramps and staircases to the airlock door; then, when the outer door was open, down the ladder to the scorched ground. The vegetation had been charred in a huge circle where the ship had landed—outside this circle the feathery fronds waved in the light breeze.

It was she who first saw the monster.

She clutched his arm. "Look!" she cried. "Look!"

He saw it coming through the low bushes. It stood as tall as himself on its eight, many jointed legs. The mandibles in the ferocious mouth were twitching hungrily, and the glare in its ruby, many-faceted eyes could only be that of bloodlust.

He ignored the woman's attempt to drag him back to the safety of the ship.

"We come in peace," he said firmly, trying to project the words telepathically at the same time. "We come in peace. We are visitors from a distant star."

The reply formed itself in his mind.

"Welcome, strange beings. Welcome to the Matriarchy of Arachna."

"You're wonderful!" whispered the woman to the man.

"Of course I'm wonderful!" replied the monster. "Am I not a female of the dominant species of this planet? By the way—which of you is the female?"

"I am," said the woman. "This is my husband, my mate."

"Indeed? Then I take it that the marriage has not yet been consummated?"

"Oh, it has," she said happily.

"What sort of monsters are you?" cried the native. "You have consummated your marriage—and yet this wretched creature still lives! If you can't do your job, madam, then I'll do it for you!"

The man stumbled and fell as the woman pushed him to one side. He saw her jump into the path of the onrushing monster, saw her desperately struggling with it, her own four, feeble limbs no match for the monster's eight.

"Run!" she cried. "To the ship! Escape from this hell planet! Tell the world that I died for love!"

*

Sitting alone in *Thunderer's* cabin, longing for the day that he would land on his home world, he remembered his bride.

"She died for love," he murmured.

"SO THIS," said the Editor, "is supposed to be a love story."

"Love stories aren't my line," sighed the writer. "I've always specialized in science fiction."

"Kid stuff. No money in it. You're like so many of the young men these days—no ambition. You don't *want* to succeed. You don't *want* to marry and beget a fine brood of happy younglings. You think that so long as you can just rub along, making barely enough money for rent and food and

liquor, no self respecting woman will look at you. After all—the dowry is almost as important as love itself... Tell me, what did you really hope for when you wrote this story and submitted it to me?"

I don't know, he thought. Honestly, I don't know. Part of me was longing for the honor and the adulation, the brief hour of fame and glory, the marriage... Part of me was hoping that this story would be a flop and sell only to one of low paying children's publishers...

"I don't know," he said.

"At least you're honest," said the Editor. "Well... I don't mind telling you that the story has promise. With a little skillful editing it could be turned into a very amusing satire. The audacity of your imagination is rather fascinating. For example—your idea that these horrid little pink skinned mammals (I suppose that your hero and heroine were mammals?) could ever evolve into intelligent beings. But I'll have to change that last scene a little. After all—no female would ever,

in any circumstances, sacrifice her life to save that of a male!"

The writer sighed again. "All right. I'll take it over to one of the children's magazines."

"Oh, no," said the Editor. "Oh, no."

"Then you're buying it?"

"Yes. And at fancy rates. A girl must have her dowry."

"Her dowry?"

"Of course. It's a long time since I was last married. I rushed round to the Registrar and legalized our union as soon as I'd finished reading the manuscript."

The writer shrank back as she started climbing over the polished desk to get at him, her many-jointed hairy legs scrabbling on the slippery surface.

"Don't be afraid," she told him. "It won't hurt. You'll be unconscious after the... preliminaries. Just look at this as a love story that's come true."

"But I don't like love stories!" he cried wildly.

Her mandibles clicked hungrily. "It's all a matter of taste."



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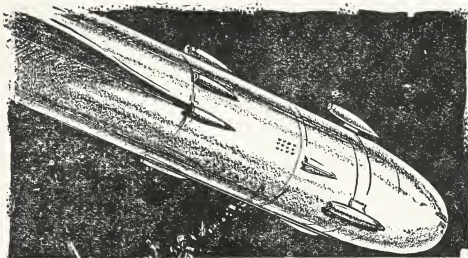
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EAST IS EAST...

by Russ Winterbotham

And the Kipling poem may well apply to some conditions that may be found some day in space...

AFTER JOHNSON died, his body was laid in space to drift endlessly between the stars. Captain Merkle said Johnson died because he was not a good spaceman. No one else said anything, but a lot of men felt that if Captain Merkle had been more sympathetic and less of a disciplinarian, Johnson might have lived.

But discipline must be rigid and unyielding where men's lives were at stake. Johnson made mistakes, like anyone else, but he was unlucky enough to get caught at it. Day after

day in solitary, lack of proper vitamins weakened him, and he died.

Captain Merkle did not mourn. He was as cold as the dark side of a spaceship; he had force, will and determination. In most ways you had to admire the man. But his biggest failing was his belief that he never erred. He was the biggest man aboard, the strongest, the smartest and probably the most sane; to him the term "extenuating circumstances" was just an excuse for weakness.

When Berkeley, the electronics man,

sobbed at the funeral he was given two days in solitary.

Twelve watches after Berkeley got out of the brig, a message came crackling over the radio. It was a high-pitched squeaky voice, definitely none of the many brands of vocal communication known by anyone aboard.

Berkeley recorded the message, taped it and put it through the translator. Even then it was incoherent, and the syntax was all jumbled. That often happens because the numerical values of ideas vary from world to world. Berkeley experimented and after trying a number of the usual correction constants, he applied the square root of minus one to the whole message.

Out came the translation as clear and sparkling as a waterfall on Venus. It said:

"Dear Positives: We have examined the body of your deceased shipmate with considerable interest. Physically he is much like ourselves. Chemically he opens new vistas for scientific exploration. We would like to exchange friendly information with your captain, but we dare not approach too close because contact might destroy the valuable information we both must have in our cargoes."

The only untranslatable thing in the message was the signature, which was '-.OQ'.

Berkeley called the first mate Eddy Hitt and let him read the message. Eddy called Captain Merkle. The captain studied the translation, listened to the recording and examined the trial and error tapes. He nodded gravely: "It's perfectly clear," he said. "They address us as positives; therefore they are negatives."

Berkeley didn't understand; neither did Eddy Hitt.

The captain explained. "They come from an anti-universe."

Both of the junior officers were familiar with the idea, often advanced by science, that a world, a universe,

even an entire galaxy might exist from a formation of anti-electrons, anti-protons and anti-neutrons. Such a system of worlds would appear normal, except that it would be built of inverted atoms. A reverse universe.

"In that case, sir," said Eddy, "we'd better leave them alone. Any contact would mean annihilation."

"Nonsense," said the Captain. "We can't pass up an opportunity like this."

"If I may say so, sir," said Berkeley, "there's an old quotation from the ancient bard Kipling to the effect that '*East is East and West is West and never the twain shall meet.*' If that were to be applied to matter and anti-matter..."

"Pish-posh," said Captain Merkle. "Analogies are for poets; scientists reason with facts."

"But we don't always have the facts..."

"I'm in command here and I say contact the other ship, arrange a rendezvous for the exchange of information."

BERKELEY saluted and set about his task. Now that he had the right conversion factors, it was simple enough to tape the reply, run it through the translator and speed it across space by radio. The reply came and was translated. The anti-galacteans were cautious, but they believed some sort of contact could be arranged. They had examined Johnson's body at a distance and had learned its chemical construction by bombarding it with sub-nuclear charges. When annihilation resulted, they knew that Johnson was made up of positive atoms, the direct antithesis of their own construction.

The leader of the other expedition, '-.OQ', suggested that Captain Merkle surround himself with a neutral shield for his own protection. Although Merkle's radiation would attack the shield of '-.OQ', and the radiation from

-.OQ' would attack the shield of Captain Merkle, they hoped the action would be slow enough so that they could exchange a great deal of what -.OQ' termed "friendly scientific banter."

Captain Merkle sent Eddy Hitt to set up a radiation shield. The Captain plotted the course of the ship, and presently set his orbit toward the rendezvous. Within a few hours they saw a shining spaceship against the background of stars. Since anti-light is quite similar to light, there was no difficulty in seeing it. The ship resembled the earthship from the outside, but must be constructed differently, because it had a tremendous gravitational effect. Eddy suggested that this might not be due so much to the ship's mass as to the interaction of gravity and anti-gravity. Each ship would attract the other with twice its relative power.

Whatever it was, Captain Merkle had no difficulty in setting his own craft in an orbit circling the common center of gravity of the two ships. Then he donned a spaceship and put a portable translator into his equipment pack. He took care to set the translator and transmitter so that the conversion constant of the square root of minus one would be in every idea presented.

As he stepped into the airlocks, the voice of -.OQ' came clearly over the speaker in the radio room. His English was flawlessly translated. He announced he was leaving the ship, and asked Captain Merkle to meet him halfway. *"May not the lesser man fail to emerge the loser."*

It was a very striking sentence, and Eddy Hitt and Berkeley pondered over it. Suddenly Eddy laughed. "I forgot to insert the conversion unit," he said, punching a key on the translator. He ran the recording tape through a tester and the voice spoke quite clearly:

"May the better man emerge victorious!"

"But he said the same thing without the conversion constant," said Berkeley. "The only difference was that he made a negative statement."

THE TWO MEN looked at each other. "Something's wrong," said Eddy. He sprang to the communication mike. "Captain Merkle!" he called. "Come back! There's something fishy about this!"

Captain Merkle replied through his helmet radio: "Tend to your duties, Hitt. Remember, I'm the commander here!"

Berkeley was talking into a microphone which fed through an auxiliary translator. He taped his own words and then played them back without applying the conversion constant: "Anti-East is not Anti-East and Anti-West is not Anti-West, and always the minus two shall not digress."

Berkeley spoke softly to the Mate. "See what it does?"

Eddy shook his head. "No, I don't."

"The phrase when inverted is meaningless. It's all tangled up with negatives."

"But the square root of minus one clears it up?"

"That's the funny part about it. The conversion constant makes it something that it isn't. You see, in a universe of anti-matter, the square root of minus one would be a real number, while in our universe it's an imaginary number. When we applied the square root of minus one to what -.OQ' said, we applied a double negative and got a positive reply. They, in turn, applied the square root of one, which to them was an imaginary number, to our message and got a reply that made sense, but which should have been utterly ridiculous to them. Kipling was right—there can be no understanding between two universes that are utterly upside down to each other. Everything

that was said would be negative to one party and positive to the other. Captain Merkle's in danger!"

Eddy sprang to the porthole and looked out into space. Between the two ships were spacesuited figures, each attached to his own craft by a lifeline.

The nearer figure, Captain Merkle, raised his gloved hand in a gesture of greeting. The other figure raised its hand, but not in greeting.

A flash of flame shot out from some kind of weapon. It instantly dissolved the force shield that protected Captain Merkle and the earthman disappeared in a silent explosion.

"The dirty low-lifer! What he meant by a friendly talk was a duel to the death!" said Berkeley.

"We should have known," said Eddy. "Why, it's high school algebra!

You know the hanky-panky about multiplying a minus by a minus gives a positive number! The square root of minus one loused up the translation."

"I know. I know," said Berkeley watching the anti-man drift back to his ship. "When I got the first message I didn't use the conversion factor, but the message made no sense. Captain Merkle *ordered* me to make it sound like something. You know how he is... was! Everything had to be neat and ordered and well-disciplined. Even things that were supposed to be wrong-side out!"

"The message shouldn't have made sense," said Eddy. "Nothing from the anti-universe would make sense to us. The captain was the victim of a double negative."



A 5-Star Novelet of Tomorrow

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INSIDE SCIENCE FICTION

by Robert A. Madle

THE SCIENCE FICTION FAN MAGAZINE Celebrates its 25th Anniversary: In January, 1932, the first issue of "Science Fiction's Only Fan Magazine" appeared. The quoted words comprise the sub-title of *The Time Traveller* which has, indeed, come to be known as the first *real* fan magazine. Prior to the issuance of *The Time Traveller*, there had been two other magazines which could be included in the fanzine category. They are not usually included, because of the basic premise for their existence.

One of these was dated May, 1930 and titled *The Comet*. It was the publication of the Science Correspondence Club (composed primarily of science fiction readers but organized for scientific discussion and for... "the final betterment of humanity."). Mimeographed, it published articles based on scientific experimentation and extrapolation. It must be mentioned, however, that there were occasional s-f stories by members, and one of these was by P. Schuyler Miller. *The Comet* publication also printed the earliest rocket articles of Willy Ley. The editor of

this conservative little scientific journal was a man who, today, is considered a radical in the field of s-f editing, Raymond A. Palmer.

The other journal referred to above was *The Planet*, which first appeared in January 1930, and was the official publication of The Scienceers, another organization which, ostensibly, had the furtherance of science as its goal. However, the members were more interested in science *fiction* than in science *per se*, and this is evident by the material appearing in *The Planet*. The editor was Allen Glasser, and this experience, it is assumed, provided the impetus for the publication of *The Time Traveller*.

This, then, was the background of *The Time Traveller*. Allen Glasser was editor, assisted by Julius Schwartz, Mortimer Weisinger, and Forrest J. Ackerman. Glasser introduced the first issue (six pages, mimeographed) with the statement "...it was deemed advisable to launch a magazine treating all the varied phases of the subject (Science Fiction) and appealing to the interests of its many devotees."

What type of material did TTT

publish? It started off with a list of scientifilms, compiled by 1932's expert in the field, Forrest J. Ackerman. (He retains this standing today.) Even at that early date, January 1932, Ackerman was able to list thirty-five films. There were articles on authors S.P. Meek and Bob Olsen; a science fiction question and answer department; a description of the problems faced by Otis Adelbert Kline in the selling of his novel, "The Planet of Peril"; and the opening installment of Mort Weisinger's "History of Science Fiction." This was meant to be a monumental study of the field and, indeed, was probably the only intensive work of this nature to appear at that time. The first eight of TTT's nine issues carried installments of the Weisinger history.

The early science fiction fans pictured science fiction as a force which could revolutionize the world. At least, they thought, this visionary field of literature, replete with idealistic, scientifically-controlled worlds of the future in which science, was usually utilized for the betterment of man, couldn't help but influence contemporary civilization. Editor Allen Glasser usually led off each issue of TTT with an editorial discussing science and science fiction. (This, of course, was inspired by the policies of just about all the professional s-f magazines at that time. The serious-constructive editorial was an integral part of the magazine and, to some extent, remains so even today.)

THE FOLLOWING lines from TTT's second issue editorial typify the average 1932 Reader's feelings on the subject:

To many people these achievements (submarine, airplane, radio) represent the summit of human progress; greater accomplishments are deemed impossible. But our contemporary science fiction writers think otherwise. They look forward to the

day when man will defy gravity, control the elements, conquer interplanetary space, harness the power of the sun, and utilize the tremendous energy of the atom.... Such visions of the future may seem fantastic now; but, as the years roll by, they will be transformed into reality, even as Verne's fancies have been today.

With its third issue, TTT appeared in printed format. Glasser condemned the press for its tongue-in-cheek treatment of space and travel and said, in part: "In this age of scientific achievement, when the wonders of yesterday become the commonplaces of today, the idea of interplanetary travel should be accepted as a definite possibility that is certain to be realized in the near future."

Other items appearing in the third issue were "My favorite Science Fiction Story," by Oswald Train; "Science Fiction Puzzles," by Mort Weisinger; and an article on s-f plays by Ackerman. But TTT wasn't 100% "sercon" (today's fannish term for "serious-constructive"—usually mentioned with derision). There were little scientific jokes scattered about, such as:

Hugo: "What keeps the moon from falling?"

Dave: "It must be the beams."

-and-

"It is unlikely that the Martians have ever tried to get to this earth, although they must know a great deal about it," says an astronomer. That probably explains why they have never tried to get here.

The use of the names Hugo and Dave above undoubtedly refers to the editor and managing editor of *Wonder Stories*, Hugo Gernsback and David Lasser.

The remaining issues of *The Time Traveller* published material of a similar nature—with an occasional story, plus indexes of the olden, already-rare s-f magazines. Also of interest was the inauguration of the s-f gossip column, a la Winchell. Mortimer Weisinger was the first with this type of article, "Out of the Ether," primarily concerned with which magazine bought which story, and which author was writing what yarn.

A most interesting little item appeared in issue #7, reprinted from the June, 1915 *Electrical Experimenter*, which should settle once and for all the question of which editor was the first to recognize the existence of science fiction as a definite segment of literature, or, if you will, writing:

Can you write a snappy,* short story, having some scientific fact as its theme? If you can write such fiction we would like to print it. The story which is appearing in the *Electrical Experimenter* at present has aroused so much enthusiasm among our readers that we have decided to publish more stories from time to time. If you have the knack, try your hand at it. It is worth while. However, please bear in mind that only scientific literature is acceptable, although not necessarily dealing with electrical subjects. "Baron Munchausen" is a good example. Suppose you try. We pay well for such original stories.

There we have the first example of an editor requesting his readers to write science fiction. The story mentioned as having been so enthusiastically received was Gernsback's own, "Ralph 124041 Plus," which later saw book publication and was reprinted in an early issue of *Amazing Stories Quarterly* (Winter, 1929). "Baron Munchausen" was not a reference to the classic, but to Gernsback's "Snappy stories" was the designation for sex stories of the period RAWL

own series, "The Scientific Adventures of Baron Munchausen."

The Time Traveller lasted just nine issues. Perhaps if dissension on the editorial board hadn't erupted, it could have lasted many more. In closing, one thought occurs to us: we wonder if Glasser had the slightest idea that, twenty-five years after the publication of his science fiction fan magazine, he would be able to look backward and realize that TTT was the first of hundreds upon hundreds amateur s-f magazines?

THE FANZINES

OUT OF THE past, into the present. As promised in last issue, when space permitted the reviewing of just *one* fanzine, we'll do much better this time and devote the balance of the department to fanzines. (After all, it is their 25th Anniversary, you know.)

PEON: Published by Charles Lee Riddle, PO Box 27, Port Deposit, Maryland. In a way one might say that *Peon* is one of the few fanzines published today that retains the basic premise of *The Time Traveller*. It is the type of magazine that the average science fiction reader can pick up and understand. It is without fanish allusions, and is one of today's perfect examples of a *science fiction fan* magazine, as contrasted with a *science fiction fan fan* magazine. *Peon* has been published now for many years, and the one we have here is issue #38. Nice photo-offset cover by Alan Hunter, plus thirty perfectly mimeod pages. Jerome Bixby is featured with a rather controversial short story, "Odd Testament." Well-written, professional stuff—but the plot is a little, shall we say, sacrilegious? Robert Bloch, in "Confessions of a Fanzine Reviewer," discusses the field and tells how he reviews fanzines for his department, "Pandora's Box," in *Imagination*. As can be expected from a Bloch article, many perceptive statements are made which, in general, we agree with. For instance, Bloch talks of how he se-

lects magazines to review—and which types are his favorites. He likes all types—just as long as they're not sloppily printed. So if you publish a rather sad-looking affair, don't expect Bloch to review it. He'll wait until you bring it up to par. To which we say—Amen.

Theodore Sturgeon shows up with an article discussing the difference between fantasy and science fiction. Scores of other articles with this theme have been published. As with previous ones, this makes interesting reading, but doesn't solve the problem. Then there's Jim Harmon's column, "Harmony." If Jim had been around the field as long as we have, he'd be writing "20 Years Ago in Science Fiction." As it is, he hasn't been around quite that long, so sticks to subjects that happened ten, or maybe fifteen years ago. This time Jim remembers comic books. And we must say that he has a good memory, for he reels off titles and characters in old comic books the way Sam Moskowitz does with the contents pages of 1926 *Amazing Stories*. Highly recommended at 15¢.

SPHERE: Published by J. A. Christoff, PO Box 196, Cantonment, Florida, 10¢ a copy. This is a comparatively new fanzine inspired, it would seem, by the attendance of its staff at the New York World Convention. It is neatly published by, we believe, the multilith process, which permits more leeway than does the mimeograph, with a better looking finished product. Fiction and serious articles are the forte of *Sphere*. Each issue features at least one short story—mostly by amateurs. (New writers would do well to investigate *Sphere* as a potential vehicle for the publication of that story you've written, but never submitted.)

Some of the better articles which have appeared in recent numbers are "Thots While Thinking," by Forrest J. Ackerman, in which Forry reminisces concerning the first s-f convention; Allen Glasser's "Science Fiction Alphabet," and the "Isaac Asimov

Profile," by Valkon. This is the first interview with a writer we've seen published in a long time and, again, shows that *The Time Traveller* is not completely obsolete. A nice little magazine.

HYPHEN: Chuck Harris and Walt Willis, 170 Upper Newtownards Road, Belfast, N. Ireland. 15¢ a copy. Here is a fanzine totally unlike either of the two reviewed above. If you want something light, humorous, and whimsical—this is for you. Some of the articles are about science fiction, some are about science fiction fans, and some are in the magazine merely because they are written by readers of s-f.

Around our office the personnel doesn't think too highly of science fiction. However, since they have been exposed to recent issues of *Hyphen* their opinion of science fiction has risen perceptibly. In the current issue, for instance, they were all fascinated by a short-short story, "More than Budgies," by Bill Schiller. This story, replete with sage-like advice, should be read by all intending to go on safari to Africa in the near future.

Walt Willis discusses all the beautiful girls in fandom. Walt is very pleased with all the glamorous, brainy gals he's met in his fannish wanderings. Co-editor Chuck Harris violently disagrees. Well, we won't take sides in this argument—except to say that Walt is more right than wrong. Robert Bloch appears with a good, intensive article on movies, fantasy and otherwise. When it comes to old films, Bloch's memory is well-nigh infallible. He reels off casts of 1925 movies quite nimbly. There are many other goodies in *Hyphen*, including Atom's inimitable cartoons. This one is for real—so get it.

CAPSULE REVIEWS

FANTASY TIMES: 10¢ for a sample from Fandom House, PO Box 2331, Paterson 23, N. J. Forever, it would appear, FT goes on. By the time this column appears, *Fantasy*

Times will be nearing its 300th issue. Published every two weeks, loaded with news and views concerning the science fiction field, primarily the professional magazine field.

MANA: 15¢ for a sample from Bill Courval, 4215 Cherokee Avenue, San Diego 4, California. In current issue, Harlan Ellison argues with Murray Leinster over the merits of today's s-f compared with that published in Hugo Gernsback's day. Ellison, of course, says today's is incomparably superior, while Leinster wants to go back to the old days. Other material of both general and fannish nature. Nice magazine.

QUELLES HORREURS!!! A collaboration of the Jenrette team, Rusty and Dave. This husband and wife team have at least one thing in common—a science-fictional sense of humor, and it exudes from the pages of their magazine. The current number is called, "The Fan Watchers' Guide," and is well-worth 10¢. But send your payment to Lt. David Jenrette, AO 3039131, 85th Bomb Sq., APO 22, New York, N. Y.

ETHERLINE: Ian J. Crozier, 6 Bramerton Road, Caulfield SE, Victoria, Australia. \$1 for 13 issues, although we assume he'll accept 10¢ for a sample. Strictly for those who want to keep up with the professional s-f field. Movie and book reviews; analyses of the latest prozines; author-story listings; and an occasional short story. Now in its 81st issue. Despite its country of origination, of

100% interest to American readers.

EXCELSIOR: Published by the editors of promag *Infinity*, Larry and Lee Shaw, 545 Manor Road, Staten Island 14, N. Y. 15¢ a copy. Not content with publishing one of the better professional magazines, Lee and Larry Shaw have now entered the subscription fanzine field. Undoubtedly they noticed the large number of fanzines being sold today, and the profits being reaped, and decided to cash in on this bonanza. At any rate, they have done a respectable job. So if you want to read a fanzine edited by a couple professional magazine editors, this is it.

ECLIPSE: 10¢ for a copy from Ray Thompson, 519 7th Avenue, Council Bluffs, Iowa. A general fanzine (mimeographed), published irregularly—as are most of them. Fiction, articles, gossip columns. Nothing outstanding, but a good dime's worth.

SATA ILLUSTRATED: 25¢ a single copy from Bill Pearson, 4516 E. Glenrosa, Phoenix, Arizona. Thanks to the adept use of the Ditto reproductive process, plus the colorful illustrations of Dan Adkins, *Sata* is one of fandom's most attractive magazines. We have recommended this one before, and continue to do so—especially if you've never seen a fanzine.

Send all fanzines for review to Robert A. Madle, 7720 Oxman Road, Palmer Park, Hyattsville, Maryland.

DID YOU KNOW

That numerous authors of fantasy and science fiction also write Topnotch detective and mystery stories?

For Example:

SENSE OF DANGER by Arthur J. Burks

appears in The November

FAST-ACTION DETECTIVE
and MYSTERY Stories



DO IT YOURSELF

by Milton
Lesser

Robert McPeek was a much-needed man, but hated for the very reason that he was needed...and by those who sought his services, most of all...



SEETHING, billowing fog greeted the rising sun as Robert McPeek shipped the oars of his dinghy and ran it aground on the east side of the river.

As much as McPeek hated the fog, he had to be grateful for it this once. With its help, he'd been able to lose the New Rochelle vigilantes in northern Manhattan. He wondered if they were still looking for him over by the North River, on the wrong side of the island. He shrugged. They were invading Manhattan territory and they knew it. If they hadn't already, they would have to give up the chase with the light of the new day. Besides, vigilantes distrusted one another and usually ended their pursuit in a senseless free-for-all. For the time being, at least, McPeek was safe.

He turned once and saw the upper half of the old U.N. Building—now the East Manhattan Home Workshop Center—rising ghost-like from the fog. Then he forgot all about the fog and the home workshop weather-makers who sowed their clouds from jerry-rigged planes, and duelled with artificial local high and low pressure areas like Cavaliers with swords—thus bringing the fog—and set out across the deserted wastelands of Long Island City, looking for work.

There was no work in Long Island City, of course. Someday in the future, the farms which had been moving east across the flat terrain of Long Island for a generation and more would encroach upon the gaunt, silent buildings and rat-infested rubble of Long Island City. Right now, though, the place was virtually deserted.

As the fog began to rise, leaving a last few tendrils on the ground to be dissipated by the rising sun, McPeek saw the scavengers, the homeless bags of rag, skin and bone who were the dregs of the old industrial society and hadn't yet been absorbed by the new rural America. They were pitiful crea-

tures, looting what was left of the old abandoned warehouses. No one bothered them because no one else wanted the loot. Until the farmers moved as far west as the river, they were safe. Years or even decades, perhaps. Maybe it was better to be a scavenger, thought McPeek. His margin of safety might be measured in hours. Or minutes.

"Hello!" McPeek shouted as one of the scavengers, a grubby old woman in tattered cloak and shawl, came close. "I'm looking for Harry Crawford's farm."

THE CRONE looked at McPeek from out of watery eyes, deep-sunk in folds of puckered skin. "Do which?" she croaked.

"The Crawford farm. It's right on the edge of Long Island City, I think."

"I don't have no truck with farmers." She looked as if she were waiting for McPeek to pull a weapon on her.

"I won't hurt you," he said. "You can save me a lot of time if you help me locate the farm. I'll pay you."

"Money? You can keep it."

McPeek had seen no money in two years. He shook his head, opened his traveling bag and withdrew a bolt of drab homespun he had received as partial payment on his New Rochelle job. "This," said McPeek. The material was drab but looked thick, felt heavy and might be warm. With winter coming, the crone eyed it greedily.

"Be a farm not two miles down the street, youngster. It's only one."

"You're sure?" McPeek said suspiciously. The crone could be making that up. Her eyes said she wanted the bolt of fabric, and two miles would be a long way for McPeek to come back running in case she had lied.

"That's the only farm I know of in this here area."

McPeek shrugged. He didn't need the bolt of homespun, except for barter. If the old woman were lying, he

could chalk it up to overhead and find the Crawford farm on his own. He tossed her the bolt and watched her clutching at it with claw-like fingers, holding it close to her watery eyes and examining the warp and woof of the fabric. Satisfied, she hobbled away across the rubble, big black rats squeaking and fleeing from her path. She ignored them completely, but they unnerved McPeek. He set out for the Crawford farm, keeping to the middle of the cracked, weathered asphalt street.

A YOUNG man with a shotgun ready on the crook of his arm met McPeek at the gate of the Crawford enclosure. A nervous type, McPeek decided, tall and thin with an anxious harried look on his face and sinewy arms protruding from the short sleeves of the homespun shirt.

"What is it?" the young man growled.

"I'm looking for Harry Crawford."

"Is that so?"

"He's expecting me." McPeek reached into his pocket and got out a hand-printed card. He'd been right about the young man. The shotgun came down and pointed squarely at his chest until the young man saw it was only a business card he was fetching. The young man took the card, read it, then, following the instructions, printed on it, lit a match and burned the card.

"This is the Crawford farm, isn't it?" McPeek asked, suddenly alarmed because the young man just stood there staring at him.

"Yeah. Yeah, sure. I never saw none of your kind before, that's all. I'm Gil Crawford, his oldest son."

McPeek sighed and relaxed. "Let's go on inside," he suggested. A moment later, Gil Crawford followed him inside the barbed wire enclosure.

A fantastic airplane of struts and wires and canvas—and *probably spit*

and string, too, thought McPeek—skipped and sputtered through the air overhead. "My brother Paul's going up to sow some weather," Gil Crawford explained.

"Can he get enough altitude?"

Gil Crawford spat at his feet. "Got the plans in the Home Workshop Center. Took us two years to build. It ought to be good."

"I'm sorry," McPeek said. Maybe that was why he had never settled down on a farm of his own, he thought. You could make fun of a man's wife, or go to the other extreme and compromise her. You could laugh at his looks, or debate the fierce pride he took in his personal religion, or take liberties with his hospitality months on end. But criticize a product of his home workshop, and you had an enemy.

"There's Dad now," Gil Crawford said, pointing.

McPeek stared in that direction. The Crawford farmhouse was a small, one-story shack with sagging walls and unpaned windows. Evidently the Crawfords hadn't been here long. The house was always the last thing a man worked on.

Beyond the shabby house was a great sprawling structure of glass and cement block. Glass brick flanked the polished, ornate door in a decorative panel on either side. One of the Crawford family—it was usually a girl. McPeek knew—had painted murals on the cement block walls of the building. The murals had been executed with only a modicum of artistic talent, but the labor which had gone into them must have been enormous. The murals depicted awkward, stick-like figures which McPeek assumed to be members of the Crawford family at work within the giant cement block structure, the workshop.

STRIDING out the door toward McPeek was a huge figure of a

man, muscles bulging all over and threatening to force the seams of his homespun trousers, shirt and jacket. He had a surly, frustrated look on his face. His eyes were small, close-set, dogmatic. That was it, also, thought McPeek as Crawford approached. Dogmatism and a splintered, atomic, circumscribed and personal chauvanism. That was another reason why McPeek didn't fit; another reason why he was an outlaw.

"You must be McPeek," Crawford boomed. The voice fit the body, not the face.

"Pleased to meet you," McPeek said automatically.

"Well, I'm not pleased to meet you. Come on inside quick before some of the neighbors see you."

"Are they that close?" McPeek demanded, surprised.

"No, but they might be snooping. That's all we'd need, them catching one of your kind around here. Come inside, will you?"

At first McPeek thought they were going to lead him into the shabby house, but Crawford changed his mind and headed for the workshop. McPeek got one quick glimpse of the Crawford farm before he went inside. Most of the acreage was in weed. A few scrawny, ill-fed chickens were hopping about. A lean-to for the six or seven head of Crawford cattle had been slapped together on one wall of the rickety house, but McPeek thought better quarters would have to be provided for them by winter, which was not a long way off.

The workshop was different, as McPeek expected it would be. At one end of the cavernous l-shaped room McPeek saw the keel of a boat. It was far bigger than the dinghy he had stolen to flee across the East River from the New Rochelle vigilantes. It would be a cabin cruiser if Crawford could build an engine or find one—and then somehow get the gasoline to run

it. Since the Crawford farm was a good two miles from the river, the boat—if and when completed—would have to be disassembled and carried down to the water piece by piece.

There was an unfinished tractor with all the latest Home Workshop do-dads.

There was the frame of an unfinished wagon, the wheel-spokes beautifully turned on the Crawford lathe.

There were parts of furniture, window frames (without glass), two ornate doors (minus hardware) which might be used in the Crawford house someday, picture frames, lamp bases (although McPeek had not seen a generator on the Crawford property,) a decorative pot-rack, window boxes and other things McPeek couldn't name. Stacks of Home Workshop plans and blueprints were piled on a table in one corner of the place.

"Sit down," Crawford said.

None of the furniture was finished, so McPeek sat on the floor in front of the unfinished boat.

"We found out about you from my cousin in New Rochelle," explained Crawford.

"I usually get my business that way. Word of mouth." It was the polite thing to say.

CRAWFORD smiled. It was not a friendly smile. "Word of mouth, huh? We were snooping, McPeek. Plain snooping."

"That's none of my business."

"All right, this is. While you're here, you'll act like one of the family; can't have it any other way. If we get any visitors, which I doubt, *you're* my cousin from New Rochelle. Got it?"

"Yes," said McPeek.

"And let's get a few things straight. I don't like your kind. I never have and I never will. It's a shame, the kind of riff-raff an honest farmer has to associate with these days."

"You're right," McPeek said, "let's

get a few things straight. I wouldn't be here unless you needed me. You know I can do the work because I come with family recommendations. But you're probably busy hatching schemes for what you're going to do after the work is finished. Just forget it."

"I ain't hatching no—"

"Well, if you are, forget it. You're afraid I'll talk. My kind doesn't; we survive on word of mouth good faith. But there are certain precautions which, naturally, I have to take."

"Such as?" asked Crawford belligerently.

"I've left the location of your farm, and your name, with my union. If I'm not back in Manhattan, safe, after a stipulated period of time, they'll make the knowledge public."

"They wouldn't!"

"Well, just see that nothing happens to me, that's all. You wouldn't want it known I've been working here. Sometimes you farmers figure the best way around something like that is to kill a man like me after he's finished. My union holds the information which says you won't."

"That's blackmail."

"I like it better than murder. Incidentally, we haven't discussed payment for my work."

"I got homespun the old lady does."

"Thank you, no. I'm not adverse to money; there are still some places you can spend it."

"We threw all our money away a long time ago."

"Jewelry, then?"

"We got some rings and things."

"Good. I'll take a look at them later. Right now I'd like to clean up and things if you don't mind."

"Got no privy," Crawford said. "I'm sorry about that. Been meaning to build one, but what with the boat and this furniture and all, I ain't had the time. There's a stream and a slit

trench a couple of hundred feet south of the house."

"That will be all right," said McPeek. "By the way, do you have a master plan for the work you want done?"

"Haven't had the chance to draw one up."

"Well, I'll go over things with you after I clean up."

"How'd you like it?" Crawford suddenly asked, taking in the whole huge interior of the workshop with a sweeping motion of his arms.

"Nice," said McPeek diplomatically. "Of course, nothing is finished yet."

"Finished? Are you crazy? We're just getting started, ain't that right, Gil?"

The younger Crawford nodded.

"We only been in it five-six years," his father went on earnestly. "Another five years, you wouldn't recognize this place."

"That's why I'm here," McPeek pointed out.

"All right. All right. Be quiet about that, will you? You don't have to rub it in. If you're going out to the stream, by the way, Gil will have to go with you. In case any of the neighbors are snooping. Nearest farm's only a mile and a half down the road. And you never know about those crazy scavengers. Lazy parasites. Won't do a lick of work for themselves."

"Let's go, Gil," McPeek said. He wished he was back in Manhattan already. Masochistic desire? He doubted it. Hiding from the law was better than this.

THE CRAWFORD farm, now five or six years in its present location, produced practically nothing. Crawford himself looked well-fed, but his wife was a scrawny woman who yawned constantly, and the six children, ranging from Mary, who was five, through Thomas, Jonathan, Hilda and the twenty-one year old twins, Gil

and Paul, all looked undernourished.

McPeek had come into the kitchen unexpectedly. He watched the children, all but Gil who was still out at the slit trench, sitting apathetically at the table, and heard Crawford and his wife, who were out in the pantry, talking.

"Will you please hurry up?" Crawford said in a loud, agitated whisper. "Get rid of those cans, for gawd's sake. You can't have him seeing cans in here; we're farmers."

"I'm doing the best I can, Harry."

Little Mary Crawford looked up at McPeek brightly and said, "Papa says you're the crook but we're to treat you nice."

"Shut up, will you?" Teen-aged Hilda warned her younger sister.

"Yesterday I went into Long Island City on my first scavenger hunt and everything," Mary told McPeek.

"That's nice."

Hilda: "Shut up!"

"We found canned aspergrass..."

"Asparagus," said Jonathan.

"And apple sauce and meat hash and all. Did you ever go scavenger hunting, Mr. Crook?"

"I'm afraid not," said McPeek. Hilda looked furious. "Your sister would rather you didn't talk, young lady."

"She made it all up about scavenger hunting," Hilda said. "We're farmers; we don't have to go grubbing around the city, do we?"

"Heck, no," said Thomas and Jonathan together. But Thomas, who was younger, winked at McPeek. "Are you going to tell us some vigilantes and crooks stories?" he wanted to know. "I never seen a real crook before. What do they do if they find you, put you in jail?"

THOMAS must have been reading old books, thought McPeek. There were no prisons now; no organized law-enforcement—only the vigilantes,

who banded together when necessary and did the job themselves, then as likely as not might be taking pot shots at one another for snooping. "No," McPeek said. "They'd probably chase me off Long Island."

Thomas looked disappointed.

"They sometimes might kill him," said Jonathan sagely. "Papa told me."

They might at that, McPeek thought grimly. Vigilantes were very unpredictable. With no specific code of law, there were too many variables, like what a man ate for breakfast and did he have an argument with his wife and how was the work coming in his workshop.

A few moments later, they sat down to a lunch of canned asparagus, canned corned beef hash, canned plums and canned V-8 cocktail. All of it tasted exactly like canned food, but McPeek said nothing.

After lunch, McPeek inspected the farm with Crawford and drew up a tentative master plan. It would be a lot of work. A month, he thought. Maybe six weeks. It wasn't quite as bad as the New Rochelle job, thought McPeek. He had been there two and a half months.

Hardly looking at it, Crawford approved the master plan and went back to his workshop to putter.

SIX WEEKS later, to the day, McPeek said, "Well, that's about all I can do."

"I don't like it," Crawford said.

"You don't like—?"

"No, not your work. I caught a couple of snoopers. Couldn't identify them. Gil and Paul had orders to shoot on sight, but they got away."

"I'll leave here tonight," McPeek decided. "I'll travel when it's dark. If they don't see me, they can't prove a thing."

Just then, the Crawford plane came soaring out of the sky and landed smoothly in the south field. "That sure

is better," Crawford admitted. "There's so much to do, I don't have the time. You know how it is."

"Then you're satisfied with the work?"

"What I seen of it. I been busy, McPeek; I started another boat, by the way."

"Another one?"

"Well, it's a big family I got. If I finished one without the other, there'd be a lot of hard feelings. Also, they had a real bargain on blueprints over to the Home Workshop Center. A man can't resist a bargain, you ought to know that."

McPeek nodded, and received two rings and a jeweled bracelet as payment for his work. They'd bring a good price in Manhattan, either in money or bartered goods. Maybe he would take money this time, McPeek thought. It was time he left this part of the country, anyway. And money was still worth something up north in conservative Boston.

"I've got some farm now," Crawford was saying. "Maybe in the spring I'll even find the time to plant some crops. We should get the first snow soon, though, so I don't have to worry about planting till next year. There's a million things I've got to do in my workshop."

In six weeks, McPeek had managed to put the Crawford homestead in order. He had repaired the chimney flu, from which smoke was rising in cheerful lazy tendrils now. He had built a privy near the house, caulked and water-proofed the leaking roof, constructed a barn for the Crawford cattle, made a few major repairs on the weather-plane, constructed plywood windows which would keep out the snow, completed the work on Crawford's tractor in case the man could find some gasoline and ever got around to farming, and done a dozen or so other things around the place.

Naturally, if all went well, Craw-

ford would be able to brag about the work as his own, provided he got any visitors, which was doubtful. Maybe, after a time, Crawford would talk it into himself and stomp back and forth proudly across his farm, convinced that, with slight help from his family, he had done the work.

McPeck shrugged. He didn't care. He'd been paid. The system was self-perpetuating now, and men like McPeck were necessary, but outlaws and—what was the word? —pariahs.

IT STARTS with a war, McPeck thought, remembering the union booklet on the subject. Once unions weren't outlawed organizations, but that was a long time ago. A war in which men learn skilled trades in the service of their country, and women take their places in the factories and on the assembly lines and learn they can use their hands for more than darning socks or cleaning house.

After the war—political isolation. A depression tossed in. People do things for themselves, before the depression because they have leisure time and are proud of their new-found skills, after the depression because they don't have money to pay for outside work. They begin to distrust outsiders; their homespun work is better. Capital and industry are artificial contrivances to keep a man in debt, anyhow.

Do it yourself, brother.

But with a new generation, the war-learned skills fade. It isn't a question of getting the people back to the farms, the union booklet said. Getting them back to the factories has become impossible. You work without pride on an assembly line. You put this bolt here or maybe slam down the drill press like so, but you don't even get to see the finished product.

A man has got to have pride in his work. Homespun, he does. Of course, the work isn't always practical. A man gets to dream around his workshop

and does the work he likes best and is too busy for unimportant things like—well, like privies. That being the case...

"What did you say, Mr. Crawford?"

"It looks like trouble."

Little Mary Crawford came running toward them, her eyes brimming with tears. "I didn't want to tell," she cried. "I didn't want to, honest. They made me."

"Snoopers?" Crawford asked.

"'Noopers, papa!"

"What did you tell them?"

"They made me tell."

"What, child?"

"We had a crook working here."

McPeck was already running for his traveling bag, tossing his gear in it. He heard shotgun fire from beyond the enclosure. "That's Gil and Paul," Crawford said breathlessly. "They know what it would mean for you to be caught here. Get lost, will you?"

"I'm going," McPeck said, taking a pistol from his bag before he closed it, and hoping he wouldn't have to use it.

"If you can get away, them snoopers can't prove a thing."

"Is there a back way out?"

"Over the fence. Hurry up!"

Jonathan sprinted up. "It's more than snoopers, papa; it's vigilantes."

"How do you know that?" Crawford asked.

"On account of there's ten of 'em. Who ever heard of ten snoopers together?"

McPeck and Crawford were running toward the rear line of the Crawford property, McPeck carrying his bag in one hand and his pistol in the other.

"Once I'm in open country I'll get away," he predicted.

"You're quick, huh?"

"I've got to be quick in my business."

"Here we are now," Crawford panted. The fence was four feet high, tight-stranded barbed wire.

McPEEK FUMBLED through his bag for a pair of wire cutters. He began to snip the barbed wire with it. "The same thing happened in New Rochelle," he said. "Vigilantes."

"You got away?" Crawford's face was drawn and worried.

"I'm here, aren't I?"

It was growing dark now. McPeek looked up at the sky. A sullen blanket of clouds brooded there, low and laden. It was cold enough to snow. The darkness and the snow would be his best protection. But he was running again. He was always running. His kind was the most necessary single feature of the new slapdash agrarian society, but was outlawed. Someday men would learn, he thought.

McPeek's wire-cutter snipped through the last of the barbed wire. "Here," he said, giving Crawford a card. "Read it, memorize the address of my union in case any of your relatives ever need any work done, then burn it."

"Burn it, huh?" Crawford said speculatively.

"You've got to, for our protection as well as yours. If you're found with that card on you, it means you were in contact with one of us, doesn't it?"

"Well, yeah."

"Then read it—and burn it."

Crawford nodded. There was a commotion in the direction of the farmhouse. Several figures stumbled across the uncultivated land. A shotgun roared, the muzzle blast a fierce orange blossom against the gathering night.

"Get going!" Crawford pleaded.

McPeek went down on one knee and carefully aimed his pistol at the nearest figure. When McPeek fired, the man screamed, threw his shotgun away, and held his injured forearm. Then McPeek was gone swiftly in the dim twilight.

Crawford looked after him just once. He sure could melt off into the landscape, that guy. When Crawford turned back to look again, McPeek had vanished. He would get away, all right.

Quickly, before the vigilantes could reach him, Crawford read the business card and burned it. The card said:

**BURN THIS CARD AFTER YOU
READ IT!!!**

*Robert A. McPeek
Manhattan Union 15
Times Square, New York
HANDYMAN*



*Look for Issue
8
Now on sale*

**Sherlock Holmes was the
greatest of them all!**

**But have you met the
strangest detective in
fiction?**

*His name is Simon Ark, and he
claims he is over a thousand
years old! Don't miss*

**THE HOUR OF NONE
by Edward D. Hoch**

**DOUBLE ACTION
DETECTIVE and MYSTERY
Stories**



CONSTRUCTIVE CRITICISM

Dear Mr. Lowndes:

In the May issue of *Science Fiction Quarterly* you categorize the several types of reader from whom you hear, but you have omitted discussion of what is probably your most important group numerically—the general readers from whom you do not hear. I think I properly belong in this group. I rarely write letters to editors; I take the magazine as I find it, and if I don't like it I simply drop it without informing the publishers. I am even now considering dropping one science fiction magazine which I have read regularly for over fifteen years, because its editorial policy has recently taken a drift which packs it with too many stories on a single theme which does not particularly interest me.

But if this non-writing group is actually the largest, it is the very one whose opinions are most important. Because your editorial in the May issue conveys the impression that you really do want to find out what the readers think, I have overcome my

inertia enough to give you my opinion.

I can't help you on the larger problems. I know what I think is a good story when I read it (and I even think I can write one, too), but I can't tell you about it; I don't want to take the trouble to work out a reasoned critique and find examples to support it. I am a picker, a quibbler, the man who writes in a book margin on page 197, "*This is contrary to what he said on page 28.*" But I think there is room for a little quibbling; you cannot leave even one brick out of a wall if you want it to look right.

I find a good deal of science fiction carelessly written as to structure, the sort of thing you see in the movies when the hero is in the toils of the gangsters and about to be shot, but suddenly the place is flooded with cops; no explanation of who called them is ever given.

In science fiction the discrepancy is often something which the author could have cleared up with a sentence or two. For instance, in Silverberg's "Quick Freeze" in your May issue, he says on page 8 that the surface of

Valdon's World consisted of frozen methane-ammonia and frozen carbon dioxide. On page 15, having successfully melted this stuff, they are pumping it away as water. Further, on page 10 he says that the water or whatever it is refreezes in a few microseconds after melting; yet on page 15 they are pumping it away from the ship with an unheated pump and delivering it downhill through an unheated siphon. I have no more immediate examples from your publication, but I have often seen them.

I read a story in a book recently, in which the hero is being pursued in a desert, and is about to give up for lack of water. But instead of being forced by thirst to surrender, he fortunately falls into another dimension, where he wanders for days without food or water but with no inconvenience, finally returning safely to the desert after everybody has gone home. In the April issue of *Fantasy and Science Fiction*, even Murray Leinster pulls one of these bubus. In "Anthropological Note" it is said that only stark necessity drove a male Krug to marriage. But necessity for what, since he is inevitably killed a few hours after the ceremony? It is not a necessity for sex, because he enters into marriage only with the greatest reluctance and horror. Nevertheless, he must first even provide himself with the bride-price, at the cost of some considerable trouble. What is it he needs so badly? Leinster doesn't say.

Another related matter which keeps some people from paying much attention to science fiction is that they feel there is a certain degree of illiteracy in it, and, regrettably, this is true. For instance, few science fiction writers seem able to handle the subjunctive. Some apparently have not heard of it; others, having heard, keep stuffing it in where it doesn't belong, merely because the construction looks similar. An example of such overnicety occurs in Peg Stanley's letter in the May issue, where she says on page 82, "as if it were

heroin I were carrying." The second verb should not be in the subjunctive mode, and "were" is incorrect.

In science fiction there are also frequent uses of singular subjects with plural verbs, and vice versa; there are plural pronouns with singular antecedents, and the reverse, or with no antecedent; there are modifiers dangling all over. Science fiction writers, even very important ones, tend to confuse words like "lay" and "lie," "affect" and "effect." Asimov and de Camp provide examples which I have noted recently.

In addition, there are certain constantly recurring errors which seem to be peculiarly associated with science fiction. I once started to keep a tabulation of these, but gave it up as being a lot of trouble, probably to no good end. However, some examples come to mind: the use of "wreck" for "wreak," as to "wreck havoc"; "wrack" for "rack," as a "wracking pain." The latter is a very common occurrence, but if the authors will look up "wrack," they will find that it is a word they may never have occasion to use. "Fulsome" is commonly employed as a reinforcement of "full"; "livid" seems to be thought to mean "florid." And it is well established in science fiction that the past tense and the participle of the verb "to lead" is "lead." "Mislead" occurs in the last paragraph on page 76, in "Readin' And Wrthin'" (sic: table of contents).

You've made a couple of slips yourself, but I'm inclined to forgive them; one is so common that one tends to fall into it, even though knowing better, and the other is so obscure a point that hardly anyone does know better. On page 71 you speak of "the right kind of a 'good cover'". You cannot have "a kind of a" anything; the article is singular, and a type requires more than one example to establish it. The expression would be "a kind of cover." The other error is in the first paragraph on page 72, "who haven't soaked up as much background as he has." After

a negative, "so" is required in place of the first "as."

Why is it that editors seem to be so rigidly opposed to touching an author's grammar and spelling? Such correction would not be tampering with his style, but an inherent function of editing, according to my dictionary. There does exist one exception to this reluctance. No science fiction story ever spells "impostor" as anything but "imposter." Since it is unbelievable that all science fiction authors would misspell this word, I lay it to the editors, who are fewer in number—unless it is a secret recognition sign of the compositor's union.

You may think these are but small matters, and individually they are, but they are far too frequent in science fiction, and they have a cumulative effect which produces a general impression of slipshod craftsmanship. Moreover, they are in the control of the editor, who ought therefore to control them, but doesn't. Readers accustomed to good style may not always be able to point out where the errors lie, but feel them nevertheless.

The proof-reading of science fiction magazines is often poor. Let us take your May issue which I have in my hand. On a separate sheet I have listed thirty-six typographical errors, and probably I missed some. I disregarded the words divided incorrectly at the ends of lines, which someone in your establishment goes out of his way to do; many lines are spaced out or squeezed in order to let him divide a word in the wrong place. I don't know what your proofreading problems may be, but I read the magazine only once to discover those listed. You may say that I was particularly on the alert for them. Sure enough, I was; and shouldn't a proof-reader be?

I have gone to such length in detailing flaws because I sympathize with your difficulty in interpreting such a letter as that from S. F. Carey, who seems really to dislike something, but nobody can tell what.

However, in general I do like your magazine, even though it might be improved. I especially like the size, which allows it to lie open ("lay open," in science fiction) without having to be hammered flat. I also like the advertising; I may not buy any of the compound to shrink my hemorrhoids without surgery, or the other one to develop my bust, but I like to speculate on what would happen if someone bought both, and got them mixed.

DR. RAYMOND WALLACE,
110 Llewellyn Road,
Montclair, New Jersey

SO WE SAID:

Dear Dr. Wallace:

What can I say after shrieking, "Omigawd!?" Well, "*Mea culpa!*" would certainly be in order. I was horrified recently to notice the number of typographical errors in *Future Science Fiction* Number 32, when the advance copies came back from the printer—errors in contents page blurbs and story blurbs, and in the departments. (While I do not re-read stories, I generally look over the blurbs, my editorial, and the departments, to see how things came out.) Well, I started checking the final proofs...shall we draw the curtain at this point? They were all right there under my nose...

And your letter shows proof positive that this wasn't just an isolated instance.

Roughly, the guilt can be allocated thus:

(1) Editor's ignorance: It is just recently that I've begun to realize that I've either forgotten a lot of elementary spelling, or never learned it in the first place. The same goes for some of the grammatical slips, such as the two you specify in my editorial. I need to learn to doubt my knowledge, and open the dictionary more often.

(2) Editor's oversight: when one must work as rapidly as most editors have to do, in order to maintain their schedule, it's astonishing how many

errors—which would be recognized as such, and corrected—are not seen at all. One sees what *should* be there, “there”, for example, when the word has actually been spelled “their”.

(3) The same two factors apply to the proofreader.

In this regard, all we can do is humbly confess fault when it is pointed out to us, and try to amend our ways.

(4) Weird occurrences at the printer's end. At times, copy which was correct in the first proofs, and in the final proofs, appears in the finished magazine quite differently. Lines have been omitted, or misplaced; lines wherein an error had appeared in the first proofs, and had been corrected in the final proofs, show up with new and often particularly horrible errors.

The classic example of this is to be found in the opening sentence of Damon Knight's first-published story. That sentence should have read, “*It was here that the Brittle People...*” I had occasion to see the final proofs of that magazine, and can testify that “Brittle People” appeared there. Yet, in the published magazine, “Brittle” has been changed to “Little”—an error which makes the entire story meaningless!

I'm told that the reason for this is that accidents sometimes make it necessary for a page of type to be reset while the magazine is rolling, and that this is where those alterations occur.

Then there are such things as titles, heading, etc., appearing in a different position in the final printing than they had in the OK'd proofs in my office...

Our proofreader, actually, is very sensitive about incorrect spacing and squeezing of lines—both vertically and horizontally, and her set of proofs is usually well larded with indications that such adjustments ought to be made. For the most part, experience has shown this to be a waste of time; and I confess to having despaired in the past few years, so that I often do not even bother to transfer these markings to the set of

proofs that are sent back when we close the book. (We keep the set that the proofreader marked for safety's sake.) Sometimes I do not notice a correction—however, these are usually caught in the second round.

All in all, high-speed production with a small staff, and printers with a large turnover of help, isn't conducive to accuracy—but that's no excuse for my not doing as much as I can at my end. Your letter convinces me that I've let myself become complacent, and I thank you for it. This is the kind of jolt that any editor needs, now and then; for if no one complains, things can deteriorate rather badly before they will be noticed.

Quibblers, pickers—Lord knows, we need them in science fiction, and we need your kind of needler. When one has read sloppy usages year after year, the accumulative effect is to dull the awareness. I happen to be sensitive to some kinds of semi-illiteracy, and need to be made sensitive to others. If, for example, I had a dollar for every “lay” I've changed to “lie”, for every “like” I've changed to “as” or “as if”, but had to hand over a dollar for every such type of usage I've failed to correct, I think I'd still come out with a sizeable amount of extra money.

In general, I let characters in a story talk in common slipshod English and grammar—unless they are supposed to be persons who would know better, and practice that knowledge—but try to catch similar usages in the narrative. In one sense, it's a losing battle, since the standard of “correctness” in usage is not what your favorite dictionary says, or what you were supposed to have learned in school, but rather what is actually spoken and written and printed to a representative extent. When I was in school, the teachers could correct me by saying, “Ain't ‘ain't’ in the dictionary.” But it is, now; the American college Dictionary recognized it as negotiable communication for “is not” or “are not”,

but says that it is unacceptable for "have not".

Perhaps future editions will list "as" or "as if" as meanings for "like", and "lie" for "lay". No doubt this will cause considerable pain to us, and perhaps to some of the dictionary editors; but if the usage becomes prevalent then an honest dictionary will have to give it *de facto* recognition—which is all a dictionary is supposed to do, anyway.

Meanwhile, don't think that you are fighting a hopeless battle. Frequent letters of his nature may result in a measurable improvement. I recall that, back in the '40s, a reader by the name of H. C. Koenig, started a campaign against non-sibilant hissing. (Example: "Get out of here," *he hissed*.) He listed such examples in letters and articles to the fan magazines, until it began to sink in. I won't be so rash as to claim that you have never seen such a thing in my magazines, but if a few have slipped by they are as naught compared to the ones which were caught by the blue pencil. When I see "he hissed", an alarm bell rings. And, better still, I think there are fewer examples to be caught in the manuscripts than there might have been had Koenig not taken the trouble to pound away at the point.

Unless I hear from you to the effect that you do not want your letter published, I'll put it into a forthcoming letter department. However, I wanted you to know that you've made an impression, and to encourage you to keep up your end of the good work, if the mood strikes you. It will probably be painful for me, but such chastening I can accept. R.A.W.L.

...AND HE REPLIED:

Dear Mr. Lowndes:

Thank you for your pleasant letter. Your confession is complete, your penance is accomplished, *te absolvo*, or as we Scots say, I gie ye assoilzie. I have no objection to your printing my earlier letter, or this one, or any part of either, although I shall be

obliged if you can somehow convey to the readers that I am not really so disgruntled as might appear from my previous letter. Confidentially, I made a mistake once myself. (This is under the seal of the confessional.)

I have had some minor experience with type lice, and know how iniquitously ubiquitous they can be. Once, in a newspaper article, the compositor made "engendered" into "endangered," almost the exact opposite in meaning, which certainly left me looking silly.

I had not recalled Mr. Koenig's name, but I do remember his campaign against non-susurrant hissing (*there's something you can hiss—try it on your snake, if you have a pit to hiss in*). Now that you have that under control, why not try to convince typesetters that there is no flour in either fluorine or fluorecence?

And if you have changed all the "likes" to "as if," have a look at "if" wherever the author has used it himself. Almost certainly, it should be either "whether" or "that." "I shall find out *whether*," "I doubt *that*," etc. "Whether" seems to have almost disappeared from the language. It brings to mind the words "whither," "whence," "hence," "hither," and so on. These words already contain the prepositional sense, but authors continually insert a redundant preposition, as "to whither," "from whence."

It has long been a matter of regret to me that the prevailing opinion on the function of dictionaries and the standard of correctness is exactly that which you set forth in your letter. I very much prefer the French system, wherein the *Académie Française* determines whether ("if") a word shall be entered in the official dictionary, and how it shall be defined. The academicians are men of deep knowledge and appreciation of language, and qualified for the job. (Don't remind me that the French call almost everything a "coup" of one kind or another; that happened before the *Académie* got hold of the dictionary.)

After all, language is by far our

most important tool. Why should we leave in the hands of tinkers the further development of an instrument requiring the highest possible degree of precision? It is no argument that we all use language, and therefore we should all have a hand in shaping it. We all wear clothes, but that does not make us tailors; we drive cars, but most of us aren't capable of designing them; we live in houses, but we are not architects, nor even carpenters.

Under the rule that if enough people say it, it must be right, any fool can lay his fumbling fingers to the pen and pervert the language. Do we allow this in mathematics? Do we say that any answer which a number of people get is right?

*The heart of man has long been
sore,
And long 'tis like to be,
That two and two make only
four,
And neither five nor three.*

Well, if we open up mathematics to plurality rule, it won't be long before that illness can be cured, and the sum of two and two will have at least three correct answers.

There are words in common use which now mean the exact opposite of what they once meant. Unfortunately, I cannot at the moment cite a case quite in point, but "empirical" comes to mind. It has right now two opposed derivative meanings. One is that something empirical is good, because it is based on experience rather than mere reasoning; the other, that something empirical is bad, because it is based on mere experience rather than reason. The user of the word rarely bothers to tell you which sense he intends, and you have to gather it, if you do, from context.

Casual acceptance and approval of loose and incorrect usage mean that in time we shall be unable to understand what earlier writers were talking about. "Internecine" is an example of this tendency to decay. It is a word which we find occasionally in

science fiction, as in "internecine struggles" and "internecine warfare," and it was pretty popular in the newspapers during World War II. *Never once* in anything written during the last twenty years have I seen this word used correctly. It is not always possible to determine what the writer supposes it means, but usually it appears that he thinks it has something to do with "internal." No doubt the dictionaries will presently list it as meaning "internal," and when we read an old book on the Napoleonic wars and find that they were described, correctly, as internecine, we shall dismiss the author as a fathead.

Mesons came very near being named "mesotrons," through ignorance on the part of their discoverers. I was at the University of California when the first mesons were observed, and I assure you that the first reports actually called them "mesotrons," by a false analogy with electrons and neutrons, and inability to recognize which part of the word was root and which was ending. Fortunately, those who did know succeeded in getting the ear of the others soon enough to make the change.

Do you know what a "shake" is, in atomic physics? Well, if I remember the figure correctly, it is .8 of a microsecond, a period of such precision that enormously expensive equipment and the brains of many ingenious men were required to establish it. Surely it deserves a better name! The original expression was, of course, "a shake of a lamb's tail," a useful colloquialism for expressing a short, indeterminate period, about equal to a jiffy. Later the term became shortened to a mere shake, as in "I'll be with you in a shake." When it was noticed that a certain nuclear event took place in an immeasurably short period, it was jokingly referred to as a shake, and when eventually the period became measurable the term remained.

I am not particularly concerned about the dignity of physics. But my small desk dictionary lists fifteen

meanings for "shake," and no doubt there are more in the unabridged; it is no service to the language to add yet another. Further, it leaves the period in physics still in doubt to the reader who has not come across the exact definition, and who supposes that nothing precise is intended. A suitable term could easily have been devised by someone who wished to retain the precision of physics, and who was sufficiently aware of the importance of language to realize that he should not be less careful with it than with other sciences.

Well, as you see, I could go on and on like this, but I don't think science fiction will come apart because of loose connectives, nor die of pain in its privative particles. What really gravels me is a book like Nat Schachner's *Space Lawyer*, which I have just finished reading in the hardcover edition. If you haven't read it, don't bother; it is a farrago of utter drivel. The characters are ludicrous, a girl who falls in love with a young man from watching him give her father a five-minute tongue-lashing, and the father, who is supposed to be a mighty, keen-thinking baron of interplanetary commerce, yet at the same time is a sort of combination of Cappy Ricks and Captain Katzenjammer.

The absurdity of the characters can be passed over, since it is a matter of opinion, mine against Schachner's, but the facts, man, the facts. At one point the hero is put-putting along in his ship at two hundred miles per second. It has taken him hours and hours to get up to this speed (I'll bet!) because the crew can't stand too great an acceleration, but when he gets an SOS he just turns around and starts back, still at the same speed, and without buttering everyone all over the side walls.

He has to go back and rescue his sweetheart, who is strangling in space through a piece of nincompoopery on her part. When he gets there she is out cold from lack of oxygen and can't open the lock, so he has to use "boarding tools." These

are not described, but are presumably on the order of a mattock and a maul, because he has to hack his way in. Having hacked open the lock door until it stuck half way, he goes in to get her. He has taken the precaution to don a spacesuit for this operation, but poor, stupid, unconscious Sally doesn't have one, and I should have expected her to burst like a bladder when all the pressure escaped. But somehow she doesn't. He picks her up in his strong, spacesuited arms, and carries her across to his ship, entering through the airlock, which has been maintained in good condition on his own ship, in order to keep a full crew.

To these thinkers of the future, our hydrogen bomb seems no more than a firecracker, and they have "space cannon" of incalculably greater power. Their ship is attacked on the ground by pirates, who turn the dreadful space cannon against it. However, these ships are built of duralinium (which the author calls dural now and then), a metal so incredibly tough that the space cannon merely dents the forward wall. If I were a pirate in those stirring times, I think I should just stick to traditional pirate weapons—boarding tools.

On the dust wrapper of the book, Mr. Schachner is given great credit as a lawyer, but his law is shaky, too. At one point, the story hangs on the ownership of an asteroid which has grazed another. The hero cites *The Law*, showing that "a freely moving body" striking a larger one belongs to the owner of the latter. But the asteroid in the story was hardly a freely moving body; it had a ship attached by magnetic grapples, and the ship exerted the power which dragged the asteroid off orbit and caused the collision.

At another point, he cites a piece of good Roman law, to the effect that anything previously unowned belongs to the first possessor, and therefore he claims ownership of a small artificial comet on which he has landed. But everyone ignores the

fact that he was not the first possessor, but had driven off a group of men, killing several who were defending their property. True, they were bad boys, even pirates on occasion, but they were not then engaged in an act of piracy but were implementing the Roman law, and even pirates can own property. I would take their case in any court; the hero committed an act of piracy.

It is tales like these which discredit the entire field, especially when published at the price of a real book and represented by the publishers to be good science fiction. I hope I shall never find anything of the kind in your publications.

One matter that I should like to see someone take up is the cooling system of a spaceship. It happens all the time that when the boys are passing too near a sun, or going too fast through atmosphere, or under energy bombardment, the ship heats up. Pretty soon it gets too hot to bear and they are about to be baked like cookies in an oven, so they turn on the refrigeration, and there are some tense moments when they don't know whether the apparatus is going to carry the load or not. But there is never anything about how it works.

Apparently no writer has ever given any thought to this at all. But the only refrigeration we know is by heat transfer, either to air or water or other fluid. What are they going to transfer it to in space? There is simply no such thing as a self-contained refrigeration unit. I can accept it if the author wants to use some channeling means by which the radiation received on one side of the ship can be run around to the other and re-radiated faster than it comes in; or if he wants to use a gimmick which soaks up all the heat into a little black box and feeds it to the engine room for more power. But I'd like to hear him say so. (Incidentally, I mentioned this point in a recent letter to Hans Stefan Santesson, but I don't think *Fantastic Universe* prints letters, if this matter seems to you worth publishing.)

I know that you are a busy man, and you need not feel any necessity to reply to this, unless the urge just overcomes you.

DR. RAYMOND WALLACE,
110 Llewellyn Road,
Montclair, New Jersey

The urge was there, Dr. Wallace, but time to write to you wasn't.

The trouble is that language isn't a precision instrument, as a rule, except when specific people, whom we call "scientists", are defining things in such a way that we say, "now he's talking like a scientist." But even our "scientist" is likely as not to be guilty of slipshod expressions and usages, etc., when he's not practicing his profession.

This is so, I think, for two main reasons (1) most people are not trained to "think and react" logically and rationally, or to take note of the relationship between what they say and what they think they mean; (2) most of the influences around us, in respect to English usage and expression, sanction and/or encourage slovenliness of speech, expression, and thought. And deplorable as it may be, I still feel that a dictionary's proper function is to report upon the meanings of words as they are currently used, in addition to listing variant meanings when there have been substantial changes. For if I take pains to learn the dictionary meaning of all the words I use and hear commonly, and resolutely thrust current corruptions into limbo, what will be the result? Will my purity of speech and expression infect those about me? Well, there may be some measure of influence, but the most likely and most widespread result is simply this: *I won't be able to understand people around me, and my attitude will antagonize them to the point where they will refuse to make any effort to understand me.* On the other hand, I can have a certain measure

[Turn To Page 114]

Old Tom Stowe's will stated that all his possessions were to go to "Trouble", and none to his wife. And since Marshal Lesgate's shooting of Stowe, though legal, was somewhat hasty, the lawman figured that the least he could do was to make sure that "Trouble" received his inheritance safely. Only... "Trouble" turned out to be a lovely, seventeen-year-old blonde, who'd been brought up wild.

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A GENT NAMED TROUBLE

by Bradley Burr

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of influence, as I said above, if my purity of speech is tempered with an sincere willingness to understand what others mean, and isn't dispensed in such a way as to accuse everyone else of being an ignorant slob. Incidentally, if there is any period in recorded history where someone was not complaining about the corruption of language, in pretty much the same terms we are, then I've overlooked a Golden Age somewhere.

Back in the 30's, science fiction authors generally depicted people exploding like deep-sea fish when exposed to the "terrible cold and utter vacuum" (sic) of space; in some stories, they froze solid so fast there wasn't time for bursting. Nat Schachner (in collaboration with Arthur Leo Zagat) was the first to state that this "ain't necessarily so", in a serial entitled "Exiles of the Moon". Later on, Stanley G. Weinbaum made much the same point, and was hailed as a great discoverer for it, in a story called "The Red Peri".

It seems to me that Schachner had a good point. Deep-sea fish explode when brought from an environment where the pressure is thousand of pounds to the square inch, to an environment where the pressure is about 15 lbs to the square inch. A man stepping out into "space" without a pressure suit (assuming that he was travelling on a space-traversing vehicle which maintained the exact pressure to which he had been used back on Earth) would suffer from shock; he'd also experience discomfort, capillary bleeding, etc. He wouldn't be in any condition to rescue the heroine and/or cavort with her right after such exposure. But is there any sound reason for assuming that he would burst like the deep-sea fish brought up to the surface of the sea? I don't think there is.

Meanwhile, I'll watch those "whethers", etc. Thanks again for the time you spent in examining SFQ and writing about it. I sincerely hope the effort won't have gone for naught.

[Turn To Page 116]

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SCIENCE FICTION QUARTERLY

DR. MACKLIN: FRONT AND
CENTER!

Dear RWL:

Enclosed are some cards with my ratings of the stories and features in the last two issues of each of your magazines. As you will notice, I give equal weight to the stories as a group, and to the feature material as a group; that is, my overall rating for the issue is the geometric mean of (A) the average story rating, and (B) the feature material rating.

I use *Astounding* as a basis for comparison of feature material, because the feature material in *Astounding* is first-rate (1.0) issue after issue, year after year. The feature material in your magazines is usually, but not always, better than that in *Astounding*.

I am delighted to see stories by Carol Emshwiller in the latest issues of *SFS* and *Future*. With six published stories she has yet to score as low as 1.0 (first-rate). Her story, "The Piece Thing", from *SFQ*, is as good as anything Van Vogt has produced, than which there is no greater compliment. Whatever you do, don't let her sell elsewhere.

Emsh is, in my opinion, the best cover artist in the field; however, he is overdoing the instrument cuff, or band, or whatever you call it, when it appears in three of your last seven issues. (*Future* Nos. 31-32, March *SFS*)

Let's have some more of damon knight's book reviews!

I, too, would like to see the by the author of... lines forgotten. Take, for example p. 49 of the May *SFS*. "Fulfillment", by the author of "One Small Room". One who has not seen "One Small Room" would say: So?, and one who has might either pass up a good story or be pleasantly surprised. If the situation were reversed one might think that Van Vogt sold his potboilers under the name Scottia.

[THIN To Page 118]

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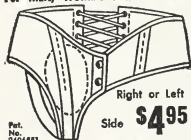
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SCIENCE FICTION QUARTERLY

By all means keep up Dr. Macklin's series, but try to avoid such boners as he pulled in attacking Robert Silverberg's *Revolt on Alpha C.* Dr. Macklin quotes Silverberg and follows with a comment:

Two exploratory ships landed on VII about twenty years ago but the pull of gravity was so strong they couldn't lift the ship up once it landed.

Sorry; no good. The energy required to land a ship on a planet is exactly equal to the energy required to take it off.

There are two errors in the above; one grammatical and one scientific. I cannot tell who made the grammatical error (it may be misquoted in *SFQ*) but the scientific error is Dr. Macklin's. I'm sorry, Dr. Macklin, but unless you can show that VII had no atmosphere, your theory will find limited acceptance. A properly-designed ship could, and probably would, depend for a landing largely upon atmospheric braking, a notoriously poor source of power for take-off. Furthermore, unless the ship were anti-grav equipped, the crew would, upon landing, be securely pinned down by gravity, and thus unable to operate the controls to start the engines; they would, in fact, be crushed to death by their own weight. It may have been incredibly stupid to have allowed themselves to get into such a wholly predictable predicament, but then, people have been known to drive when drunk, fight wars, vote Republican, etc.

I am much in favor of the index at the end of each volume, but since it is of less general interest than are the stories and features, I would suggest it be printed in about six or seven point type after this. The whiter paper is a considerable improvement in the May *SFS*.

In reply to Mr. S. F. Carey, I found "Calculated Decision" an excellent story. Halftrack and drone are common enough terms, not at all peculiar to *stf*. Ringwall and tank-

[Turn To Page 120]

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SCIENCE FICTION QUARTERLY

dozer are self-explanatory. The story made a valid point clearly and concisely. What more can you ask?

I would certainly like to see "The Reckoning" revived in all three magazines. Whether or not it is, I will try to send in my ratings for each issue, either on a postal card or on a 3 x 5 card accompanying a letter.

Here's hoping to see *Science Fiction Stories* pull out of second place. *Astounding* has won plenty of *Huges*, and *Fantasy* and *Science Fiction* and *Infinity* are not necessarily going to be satisfied with third and fourth places, respectively. (I count all three of your magazines as one in second place.)

BRET HOOPER,

64 Beech Street,
Massena, New York

STATEMENT OF THE ACCUSED

Dear Mr. Lowndes:

It had to happen eventually, I suppose. Mr. Hooper is, of course, correct—as far as the scientific analysis of the situation goes. Although there is no mention in *Revolt On Alpha C* of Alpha Centauri Seven's atmosphere, one might logically assume that it would have a very thick, dense atmospheric blanket if it was, as Mr. Silverberg said, "sort of a super-Jupiter". With such a blanket, an atmospheric braking orbit would most certainly be probable, in which case, the ship would be able to land, even if it didn't have enough power to take off. Very, very good, Mr. Hooper.

However, let me quote the passage in full:

"Alpha C VII and VIII are giant planets," Larry continued. "Too heavy to support human life or even to allow any humans to land there. Sort of a super-Jupiter, you might say."

"I remember reading about those two," Harl said. "Two exploratory ships landed on VII about twenty years ago, but the pull of gravity was so strong

[Turn To Page 122]

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they couldn't lift the ship up once it landed. In fact they couldn't do anything at all—the gravity plastered them to the ground, and they just stuck there till they starved to death. Typical Patrol foul-up."

There are your grammatical errors. Two planets become "a" super-Jupiter; two ships become "the ship" and "it"; and the pronoun "they", used twice in the second paragraph, has no antecedent unless it's the ship(s). And how can a ship starve to death? Still, this is the conversation of two teen-age boys; maybe the Patrol Academy doesn't teach English grammar.

Now let's see. The gravity is great enough to plaster the crewmen to the ground, but not enough to kill them,

since they stayed alive long enough to starve to death. Hmmm.

It is doubtful that even a prone or supine human body could stand ten gravities for twenty-four hours, much less survive long enough to starve to death or even to die of thirst. But let's say the surface gravity of Alpha C VII is ten g's. Any spaceship that can't make eleven g's acceleration isn't going to be worth much. Evidently, these ships could do it, because, earlier in the book—page one, as a matter of fact—it is plainly stated that the ships can travel at 100,000 miles per second within the limits of the Solar System. A little computing shows that, in order to reach a velocity of 100,000 mps, a ship accelerating at only eleven gravities would have to travel for seventeen days, eight hours, and forty minutes. Dur-

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IT SAYS HERE

ing that time, it would travel a total of seventy-five thousand million miles, which is more than ten times the diameter of the orbit of Pluto!

Obviously, then, the ships in Mr. Silverberg's story have the ability to accelerate at much, *much* greater accelerations than eleven gravities. If they don't have antigravity, they'll be squashed pretty flat; if they do, how did they get trapped on Alpha C VII? And a ship with that kind of power needn't be trapped on the surface of anything smaller than a good-sized star.

Notwithstanding, and nonetheless, Mr. Hooper is still correct. It was I who misstated my objections to the scene, and I can think of no acceptable excuse for so heinous a crime. My heretofore impregnable sense of utter infallibility has withered away to a mere wisp.

RICHARD H. MACKLIN, Ph.D.

A QUARTERLY—EVERY OTHER MONTH?

Dear Editor:

Why don't you go bi-monthly? Three months is much too long to wait between issues of the only science fiction pulp left on the market. You have some pretty good stories in your first 35¢ issue.

I had thought with sorrow that we had seen the last of Macklin's series of articles, when none appeared in your last issue, but now I'm happy to find Dr. Macklin back in full force.

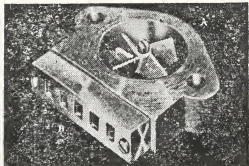
Looking over my back files of SFQ, and other science fiction magazines, I find that my collection could be larger. I also have a few issues of science fiction magazines for sale at a dime each, plus 5¢ postage on each. Interested people should write to me, or call me at GEdney 4-3498. I am also interested in starting a science fiction club. Those interested should contact me.

The past six or seven issues of SFQ have been very good. My favorite stories in these issues are:

[Turn Page]



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SCIENCE FICTION QUARTERLY

"Quick Freeze" by Robert Silverberg; "Time To Stop" by Randall Garrett; "Deus Ex Machina" by Robert Randall; "Wyvernhold" by L. Sprague de Camp; "No Future In This" by Robert Randall; "The Piece Thing" and "Love Me Again", both by Carol Emshwiller.

The best letter in your August issue was by Willis Freeman.

ANDREW REISS,
741 Westminister Road,
Brooklyn 30, NY

OVER-ALL REPORT

Dear Mr. Lowndes:

I have just done something monstrous, unprecedented, unheard-of. Within the past 24 hours, I read the fiction content of 11 issues of *Science Fiction Quarterly*—Feb. '55 to date (except Aug. '55) yesterday afternoon and evening; Aug. & Nov. '51 this morning. (The recent issues took only an hour each.) As a result, I feel competent to pass judgment on the magazine, perhaps even more so than some of your steady readers.

My position as a reader of stf: I started buying some magazines in '53, starting with the new ones appearing at the time, and adding other titles until last summer I started on the Ziff-Davis and Columbia Magazines, becoming one of the fans who reads everything that appears on the stands. In recent months, I invested heavily in the pulp magazines. My collection of paperbound material numbers close to 1200, I can count my hardcovers without taking off my shoes, but I have read the stf selections of several libraries. I've been behind on my reading for the past six months, but my interest has picked up recently.

First off, I like your magazine. Accepting the statement that about 90% of everything published is tripe, even your tripe is competently written and readable. And there has been tremendous improvement in your magazine. The difference between

[Turn To Page 126]

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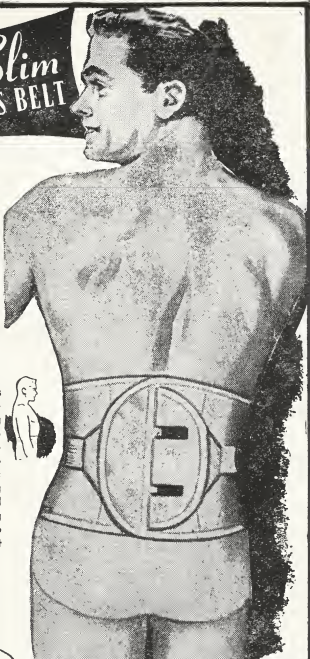
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SCIENCE FICTION QUARTERLY

early and recent issues is tremendous, and great improvement can be seen during the past two years. Just as a case in point, compare "Survival of the Fittest" (Henderson), with "One of Them," (Abernathy), in Nov. '51 and May '56 issues respectively. At this time, I would put your magazines in the top rank. There are a number of them there at this moment: the traditional "Big 3", *Venture*, *Fantastic Universe*, *Satellite*, *Infinity*, *If*, and your mags, which I count as one. I hesitate to put these in any order; at best I can divide this top rank in half, putting the big 3, *Venture*, and your mags in the top classification.

As I say, I hesitate to rank them; the editorial policies are different, and, taken together, the magazines offer every conceivable variety of fiction. I am seemingly self-contradictory in my opinions; I am all in favor of articles and letter section in one magazine, yet I oppose them in another. If there are any which I would buy for features alone, they are yours; there are others I would buy strictly for the stories, and complain violently if the editor wanted to add a letter section.

Notice that I speak of your magazines as one; it seems to me that there are few stories (like Merrill's "Homecalling" in *Science Fiction Stories*) which could not as well have been published in one of the other two. If you don't think so, I'd like for you to explain just what it is that determines your choice. I wonder, now, what your standing would be in a popularity poll if all your mags were classed as one...

After such an amount of reading, I've got a strong impression of what your magazine is like, and by Crom, it is a *magazine*—not just some stories stuck together between covers. The editorials are the best in the business, striking just the right note between triviality and devotion to a Cause. The letters, section: same comments. "Inside S.F." is your most valuable feature; the book reviews

[Turn To Page 128]



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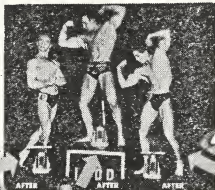
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SCIENCE FICTION QUARTERLY

are competent (if knight's, brilliant—where is he?); parodies range from hilarious to unfunny; illustrations are competent; stories...

The stories cover the full range of quality. In the early issues you had some notably trite stuff. In assorted ones here and there, I caught on to some gimmick before it was revealed. Violence in the stories is reduced to a commonplace event, no more than a gesture. Sex is conspicuously absent in the stories, and so (yes!) is humor. In fact, the stories are everything that the critics of science fiction state to be the bad points. Resisting the urge to apologize, I can do no more than point to the better stories that do exist.

Now I'll just go along and point out whatever is worthy of mention. "We Shall Come Back" (Liddell), in Nov. '51 and "Second Dawn" (Clarke), in Aug. '51 are the only ones worthy of being remembered. Then comes that horrible gap in my files, which I hope to fill up very soon... "The Fission of Mrs. Custer" (Marks), Feb. '55, is one of the rare funny stories. "Noogles Have to Explain" (Boren), Nov. '55, another. "Why Should I Stop?" (Budrys), while good, gives me the impression that you have a weakness for "correspondence" stories; "The Slizzers" (Bixby, in *Science Fiction Stories*) was another of the sort. "No Future in This" (Randall), had more promise than some of the other attempts at "meaningful" stories, but was still too much on a superficial level; so was its sequel. You may go ahead and continue the series, but I don't expect to be left with the impression that the author has said something. In the past year, a majority of your stories have come close to being very good, even memorable—but always some triviality, or the treatment of the theme, have intervened. The last paragraph, for instance, took something away from Pohl's "Small Lords". "Children of Fortune" (Jordan) will be one of my candidates for year's best in the Columbia mags.

And with this we come to the May issue. "Quick Freeze" (Silverberg)

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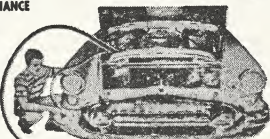
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was competent hackwork, by one of today's foremost stf hacks. I mean no insult by this. One who writes bad fiction other editors' demand is *ipso facto* a hack. I have only to point to "Harwood's Vortex" in the April '57 *Imagination* and rest my case. "Name Your Tiger" (Lesser), same comment; again I can point out some horrible examples of Lesser's work. "Cardsharp" (Franson), makes a good point; I anticipated the gimmick. "Let's Have Fun", (de Camp), was competent. "All Around a Pig's Tail" (Marks) was very funny. "Second Chance", (Cox Jr.), was readable; I anticipated part of the ending. "The Stunning Science Fiction Cap" (MacDow), was one of the better fannish stories. The parody was bad; Mr. Asimov has a hard time being funny.

By next time I hope to report on the remaining issues of SFO.

DENNIS BISENIEKS,

Ann Arbor, Michigan

Unfortunately, hardly any of us know what is really funny. We know what *we* consider funny, and have a good idea—more or less—as to what our friends and acquaintances think funny. It's more often less, though, as we may discover to our chagrin when our ideas are put to the test. All I can say is that Ike thought his parody was funny; I got a chuckle out of it; and I know that *some* of the readers did. But whether a majority, or even a plurality, found it no more amusing than you did, I know not, alas. Of course, as much as I love you, Mr. Bisenieks, (and every other reader who writes in), I hope that you were the only one to be disappointed and am sorrowful even in that case.

FOR THE RECORD

Dear Bob:

After so many years as a fan, when I never bothered writing letters to the editor, I suddenly find myself—now that I'm *in* the business—writing a letter an issue...to you!

There has got to be some sort of scopalominic drug in the pulp paper you use, to hypnotically get me to write. It's a great bit, but don't let the Pure Food And Drug Comission hear about you—they'll ban science fiction!

But seriously, the reason I'm writing, is to clear a comment made by your friend and mine, Bob Madle, in his "Inside Science Fiction" column (*SF Quarterly*, May). Not that clarification serves any real purpose, it's just that I don't like the inference that I write most of my stuff under pen names. T'ain't so. Bob got a bit confused there. Ellis Hart is my only other byline, but of the one hundred stories I sold in 1956, only about fifteen appeared under any other name than Harlan Ellison; and the reasons *those* fifteen appeared under pseudonyms was primarily editorial, and had nothing to do with what name I wanted on them. For instance, in some issues, I had two stories, and the editors (as you know) dislike having two yarns by the same byline. I make this clarification, particularly because I take a great deal of pride in what I write, and I try my damndest to get my own name on everything I sell, whereas the general opinion of writers who sell profusely, but all under pen-names, is that they are ashamed of the stuff they do. Not I. I'll take responsibility even for the clinkers. But thanks anyhow for the publicity in the column...however, I won't be needing it for a while. By the time anyone but yourself reads this, I'll be packing an M-1 for Unca' Sammy.

By the way...the magazine was just fine. Particularly friend Bob's "Quick Freeze". But *who* is this Robert A. W. Lowndes character, and what is "Readin' and Wrthin'?"

HARLAN ELLISON

The initials "A.W." between the "Robert" and the "Lowndes" stand for "Augustine Ward"... The "Wrthin'" in "Readin' and Wrthin'" was, of course, an error which I hope I will not overlook again.

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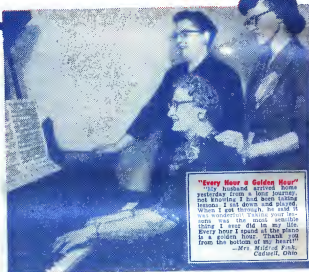
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